

FOCUSSED TSEH6860

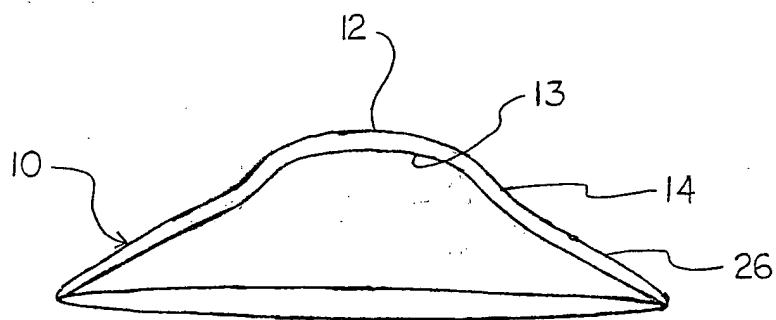
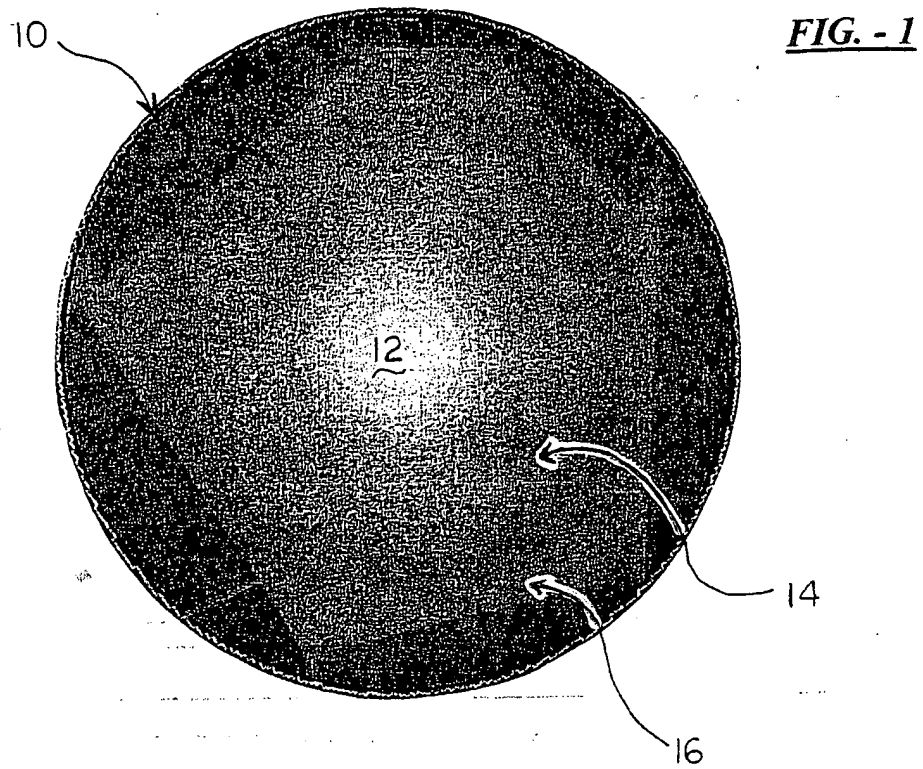


FIG. - 2

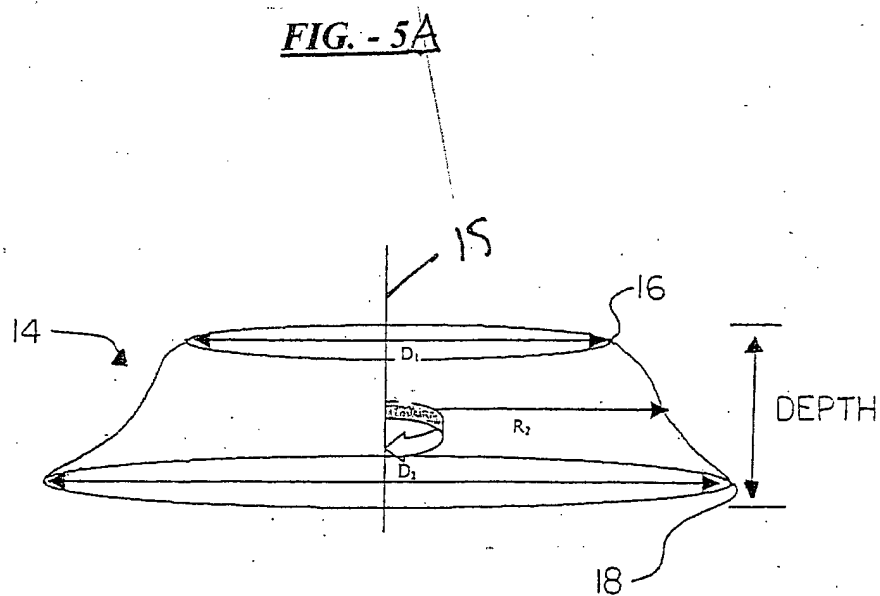
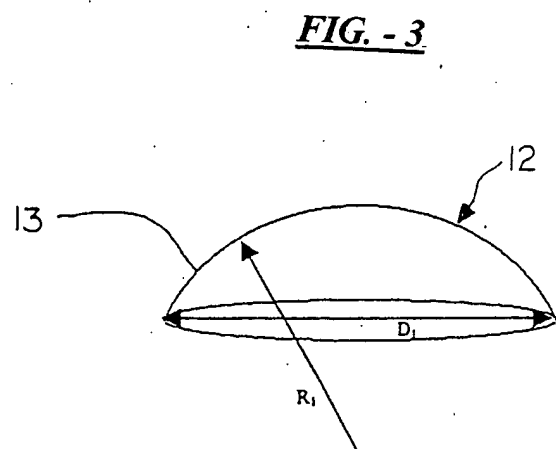


FIG.-4A

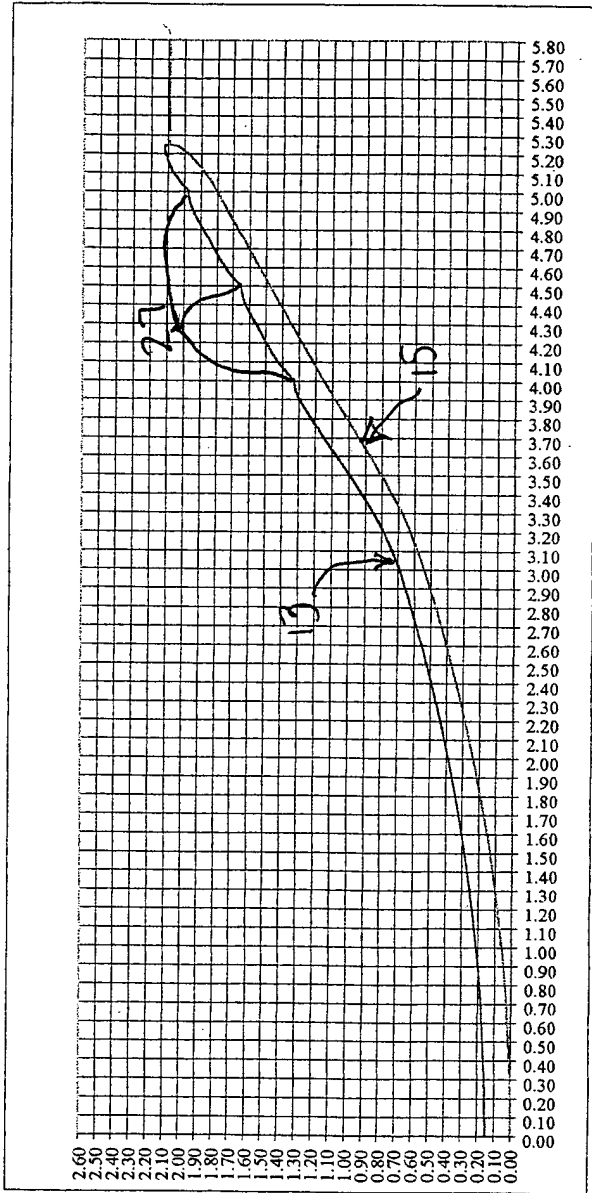


FIG.-4B

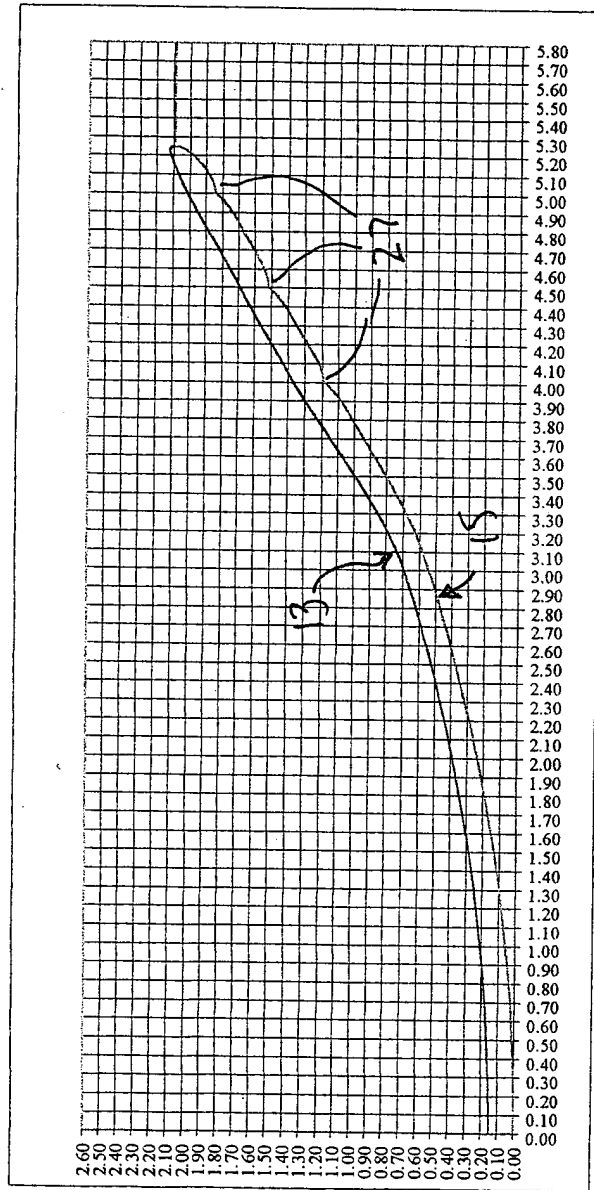


FIG. - 7

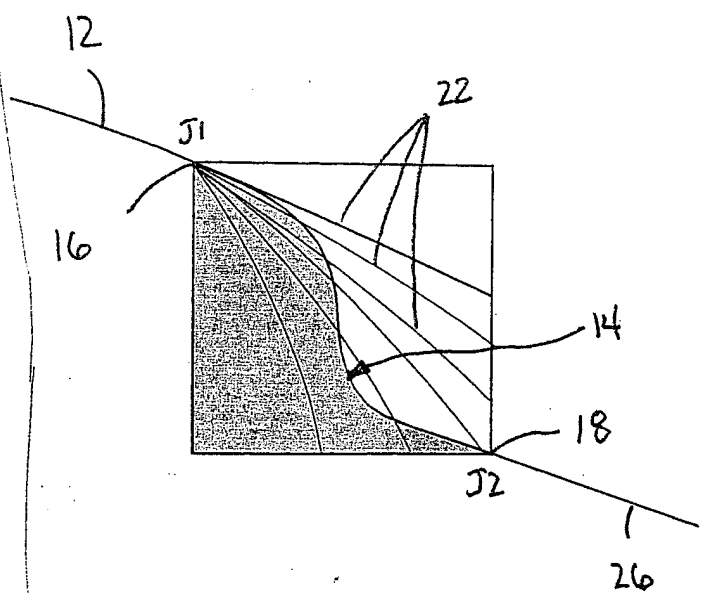
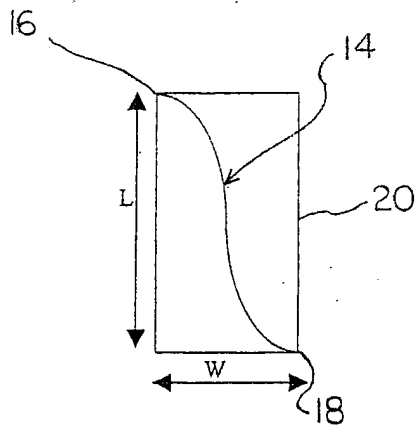


FIG. - 6

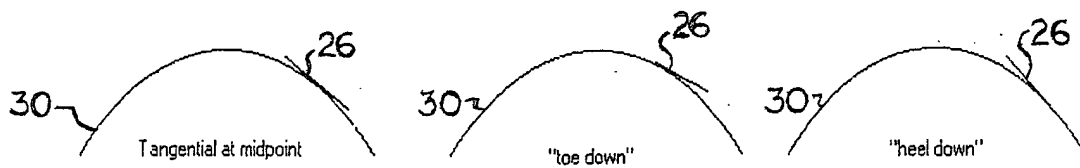
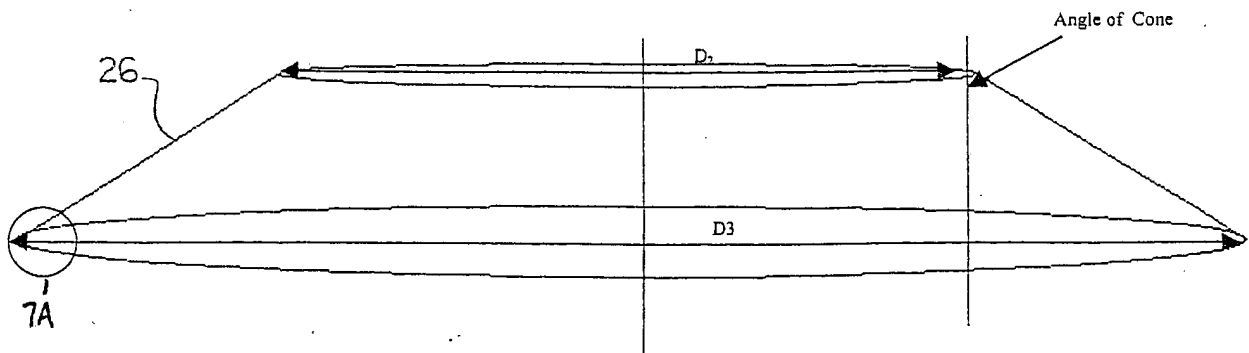


FIG. - 8A

FIG. - 8B

FIG. - 8C

208		200		202		204	
BC	Selected bc (6.9-10.4/0.1) (7.70-9.1/.05)	8.40	Suggested Base Curve is 8.4	1	corneal apical radius (mm)	7.58	lens / cornea power (D) difference wanted
J1	Radial distance (OZ2) from the lens center to 1st junction mm (1.0- 5.9/0.1)	210	3.00				ellipticity of the cornea
SW	Width of the S curve mm (.75,1)	1.00	EYE				HVID (mm)
MAT	Lens material (FP30, FP60, FP92, FPI51, HDS, Other)	212	Ref. Index of material used = 1.449 If 'other' was selected input RI in Cell H4				
P	lens power desired (-1.00, -0.50, 0.00, 0.50, 0.75, 1.0, 1.25, 1.5, 2.0, 2.5)	HDS	214	Volume between BC and cornea (uL) = 0.994			Desired edge lift (mm) when landed at full Diameter = 0.083
92	Delta R (mm) translation of 1st junction radially from BC origin (0.08-0.2/0.02)	0.50	8.37	Volume between S curve and cornea (uL) = 1.739			Ab, the long axis of the ellipse creating the base curve edge (below)
92	Delta R (mm) translation of 2nd junction radially from BC origin (0.1-0.22/0.02)	222	0.14	Volume between pretouch Landing Zone and cornea (uL) = 0.718			recommended radius of curve for lentic = 8.106
A	Angle of the landing zone (-25.5 to -50.0/.5)	216	0.18	TOTAL VOLUME = 3.45(uL)			Origin for lentic curve is on y axis displaced from apex of front curve = 8.068
D	selected lens diameter mm (8.0-12.9/0.1)	209	10.50	Diameter where LZ would make tangential touch = 9.08			Estimated elevation at J2 = 0.070
SD	Selected depth of the S curve mm (.15-1.0/.05) (0.3-0.65/.025) use next smaller than est.	220	0.500	Dia giving desired LZ lift = 10.42			base to front at which the transition from base ellipse to front ellipse is found (below)
		218		Edge lift at selected diameter = 0.094			0.01
							0.25
							0.006
							0.40
							0.18
							0.01
							0.25
							0.01

FIG.-10

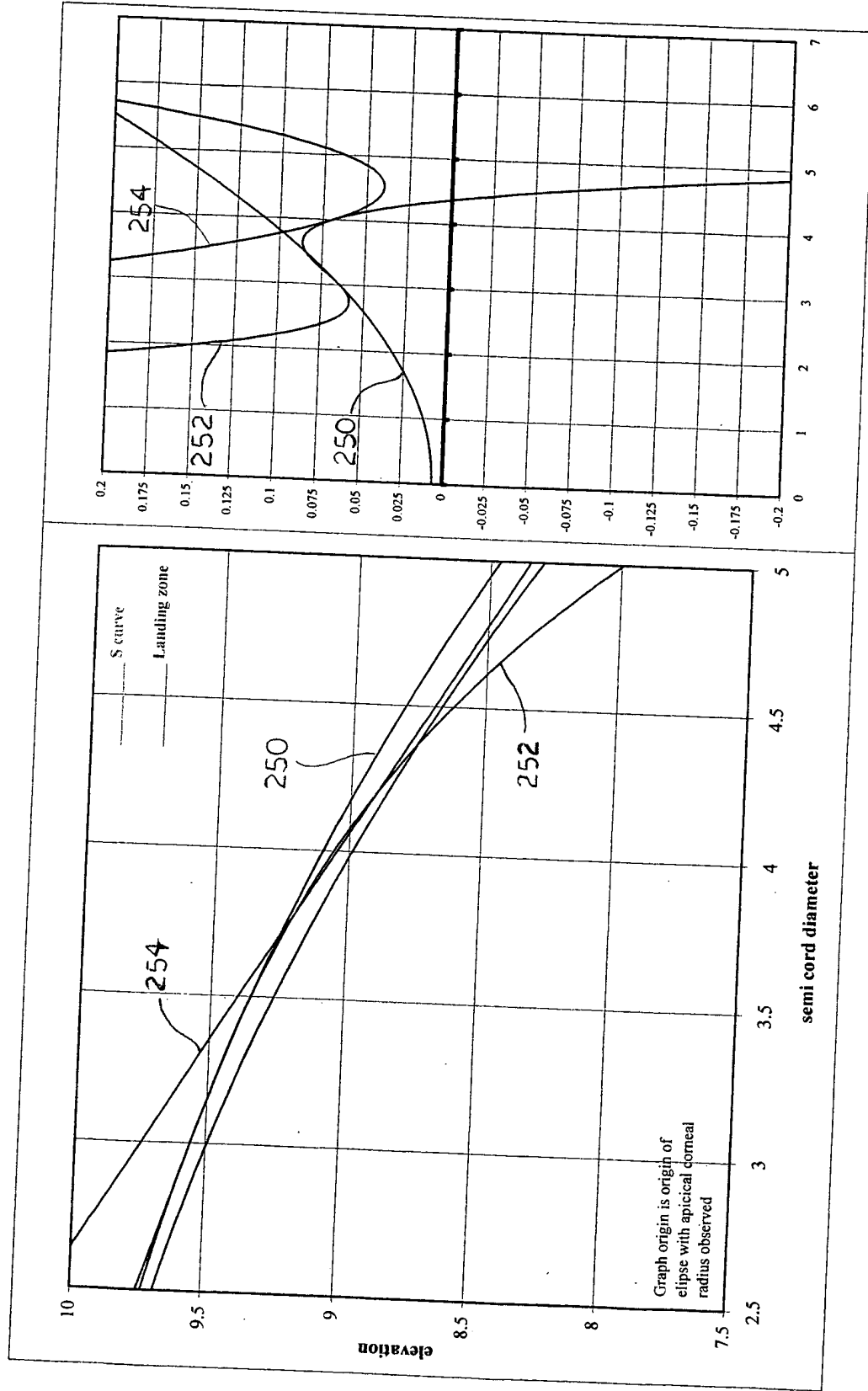


FIG. -11

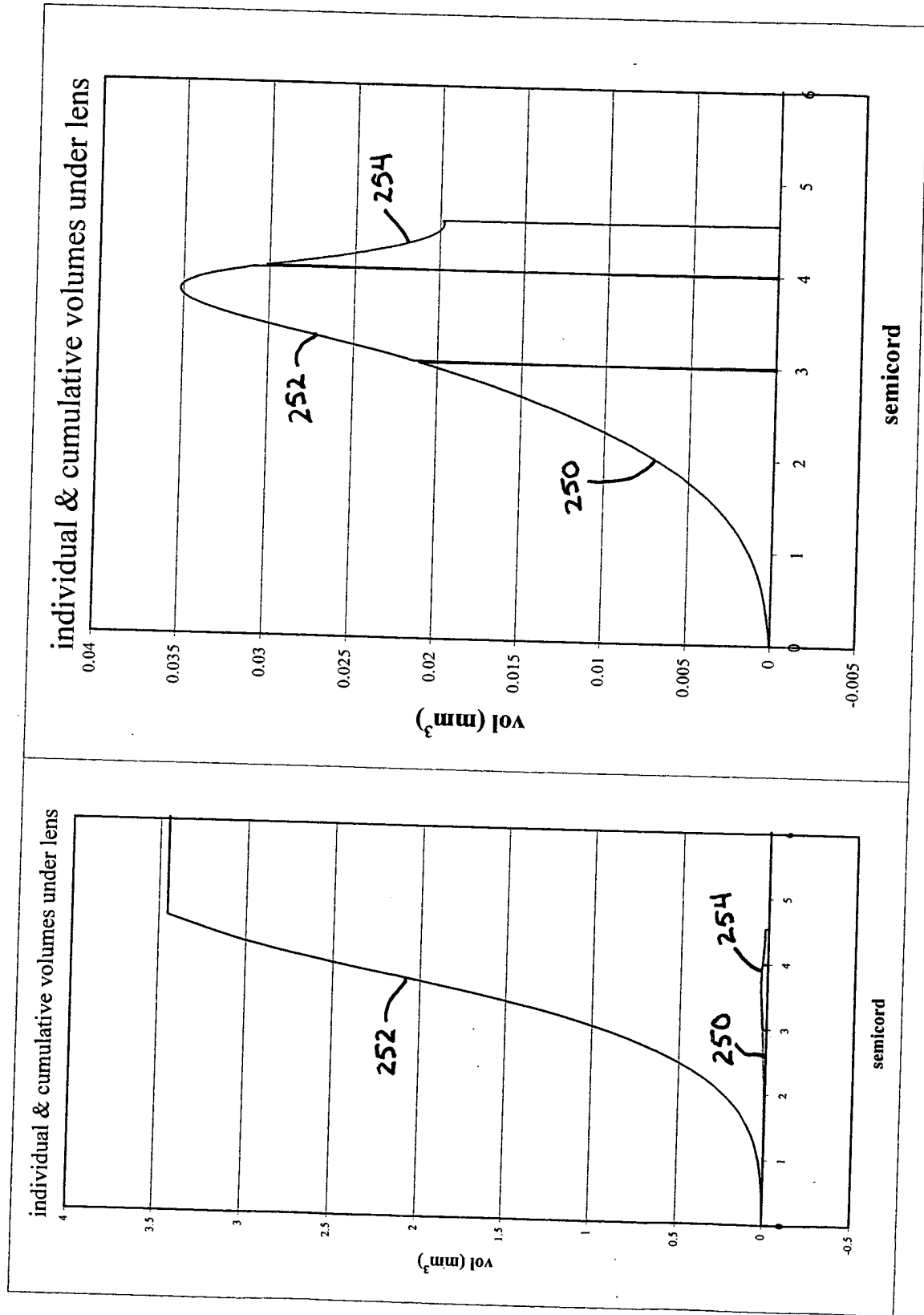


FIG.-12

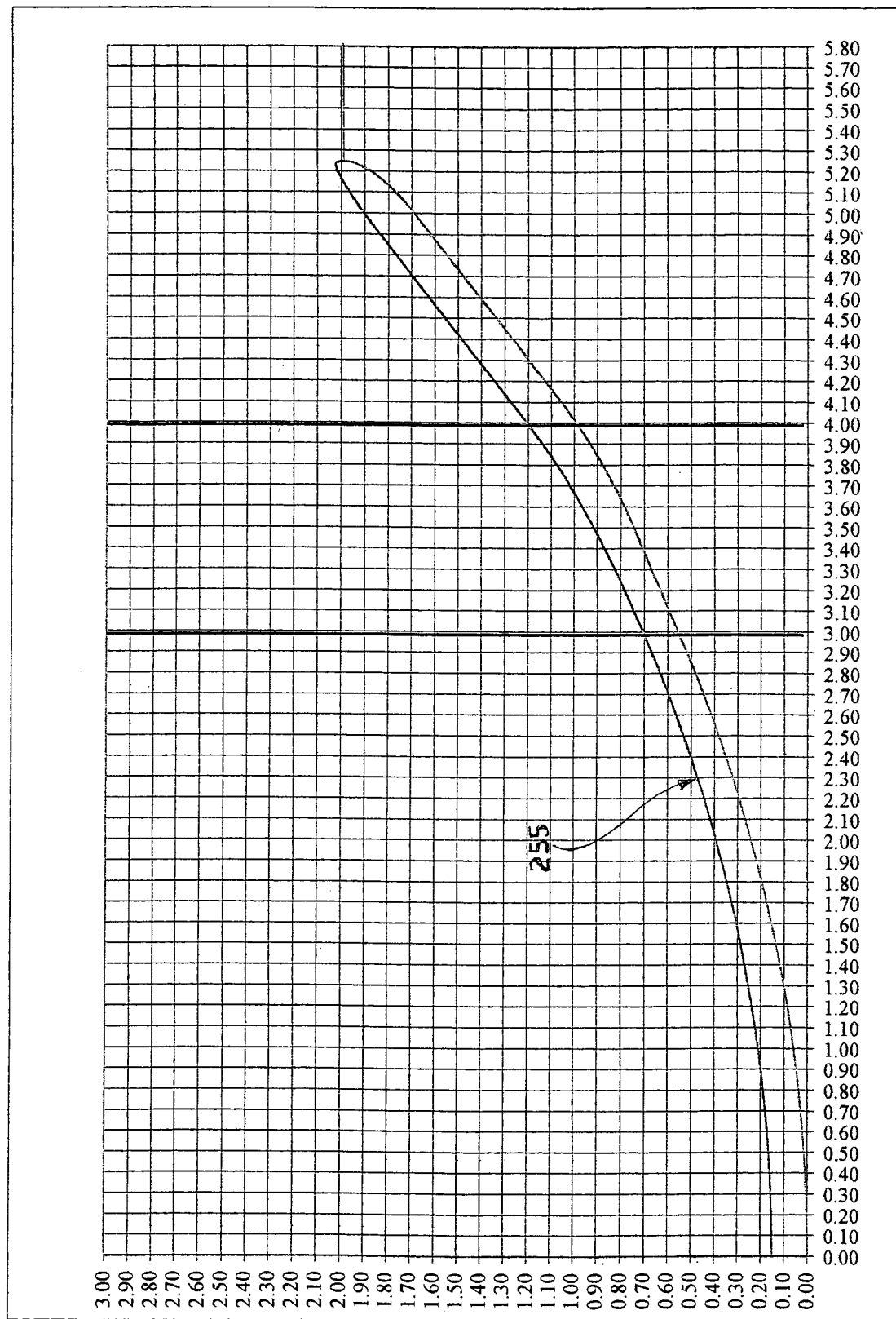


FIG.-13

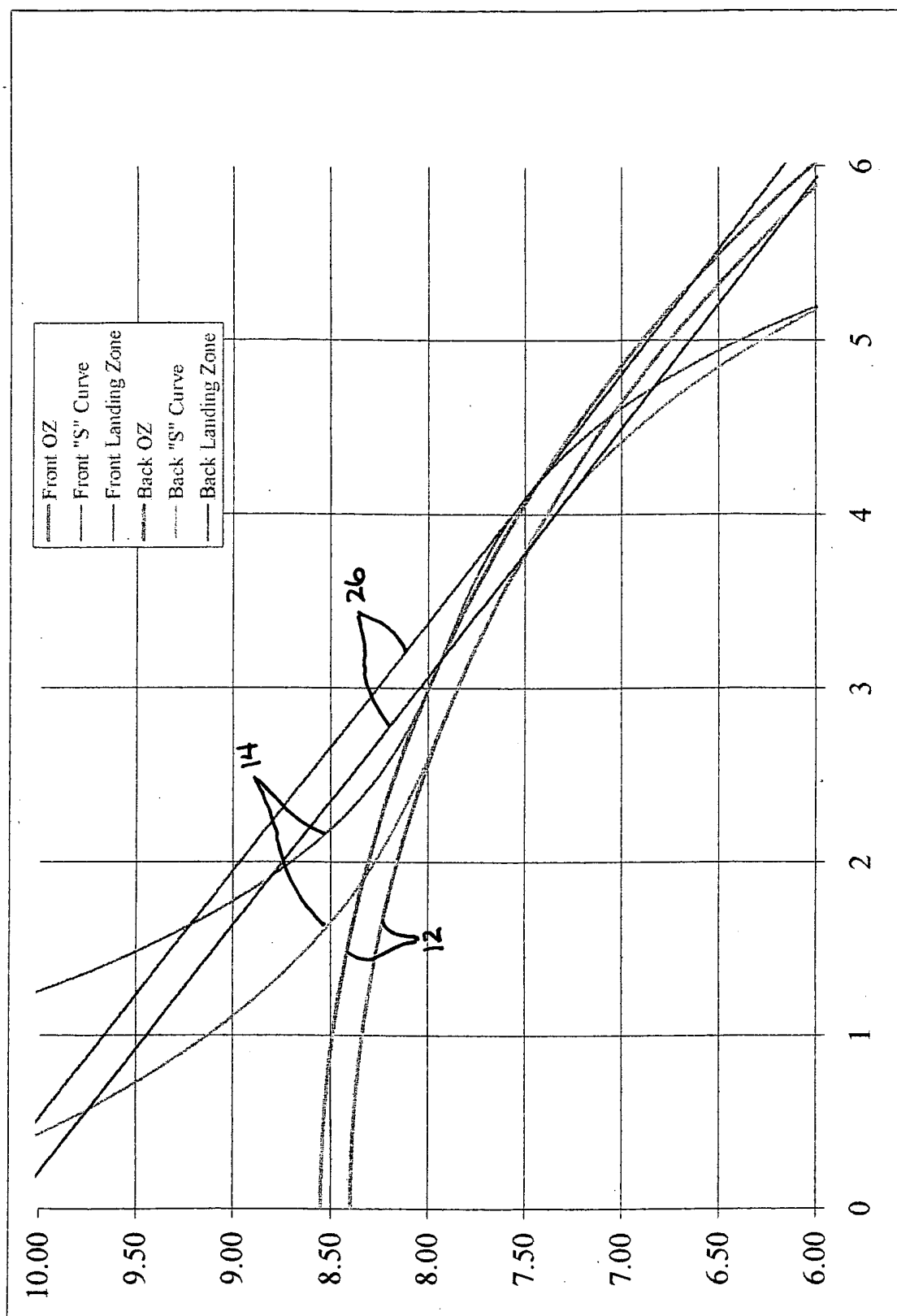


FIG-14

FIG-14

FIG.-15

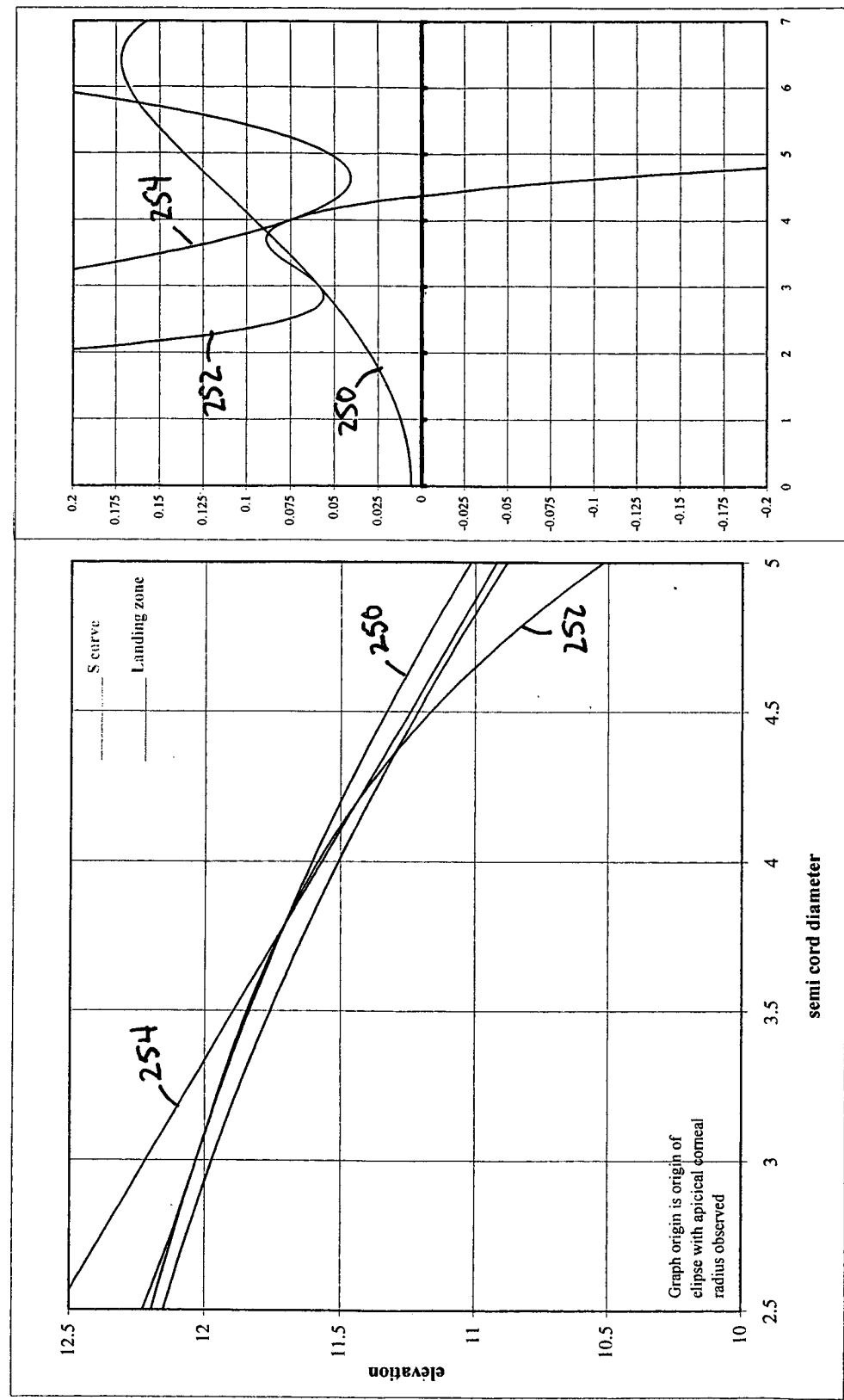


FIG.-16

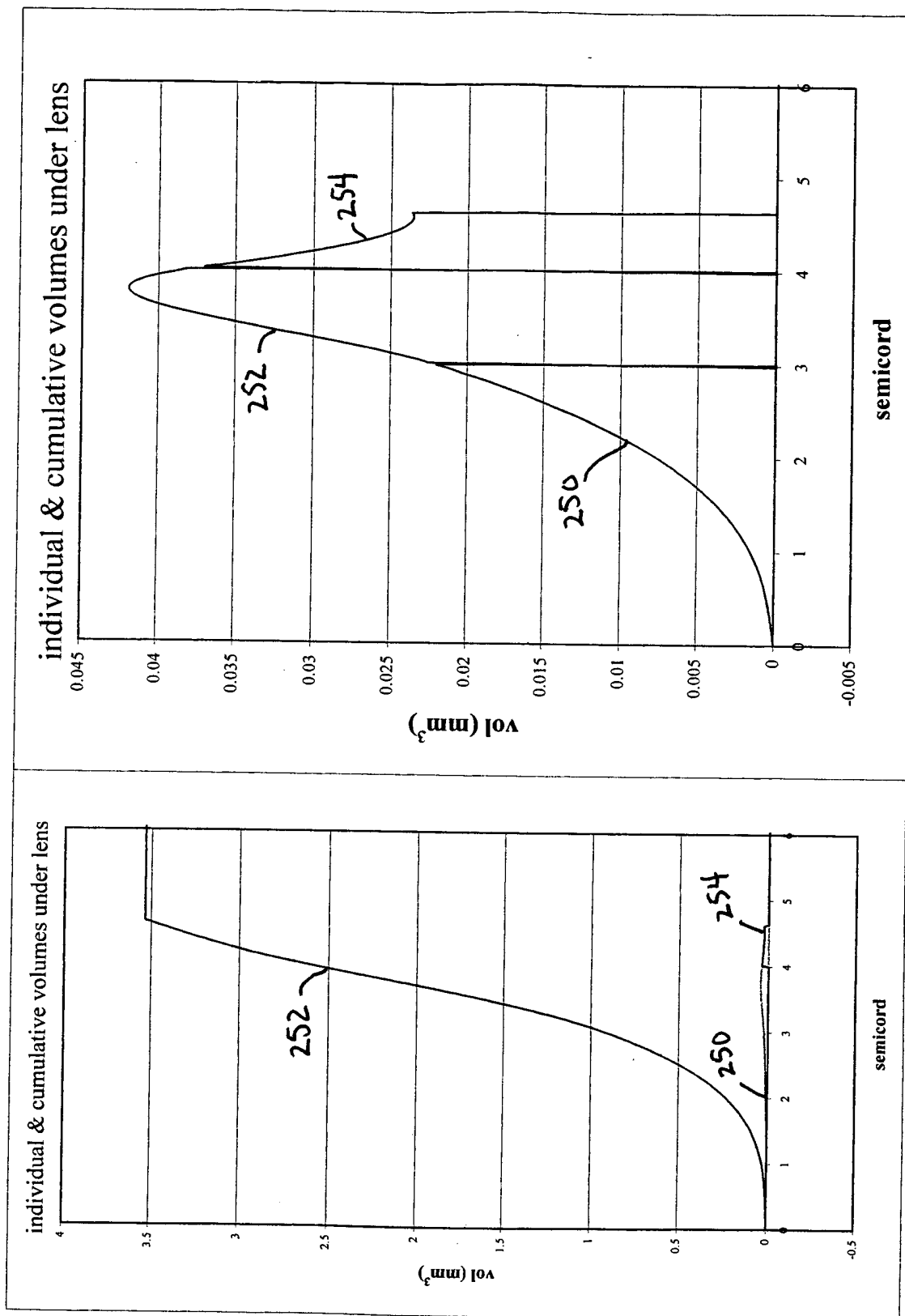


FIG.-17

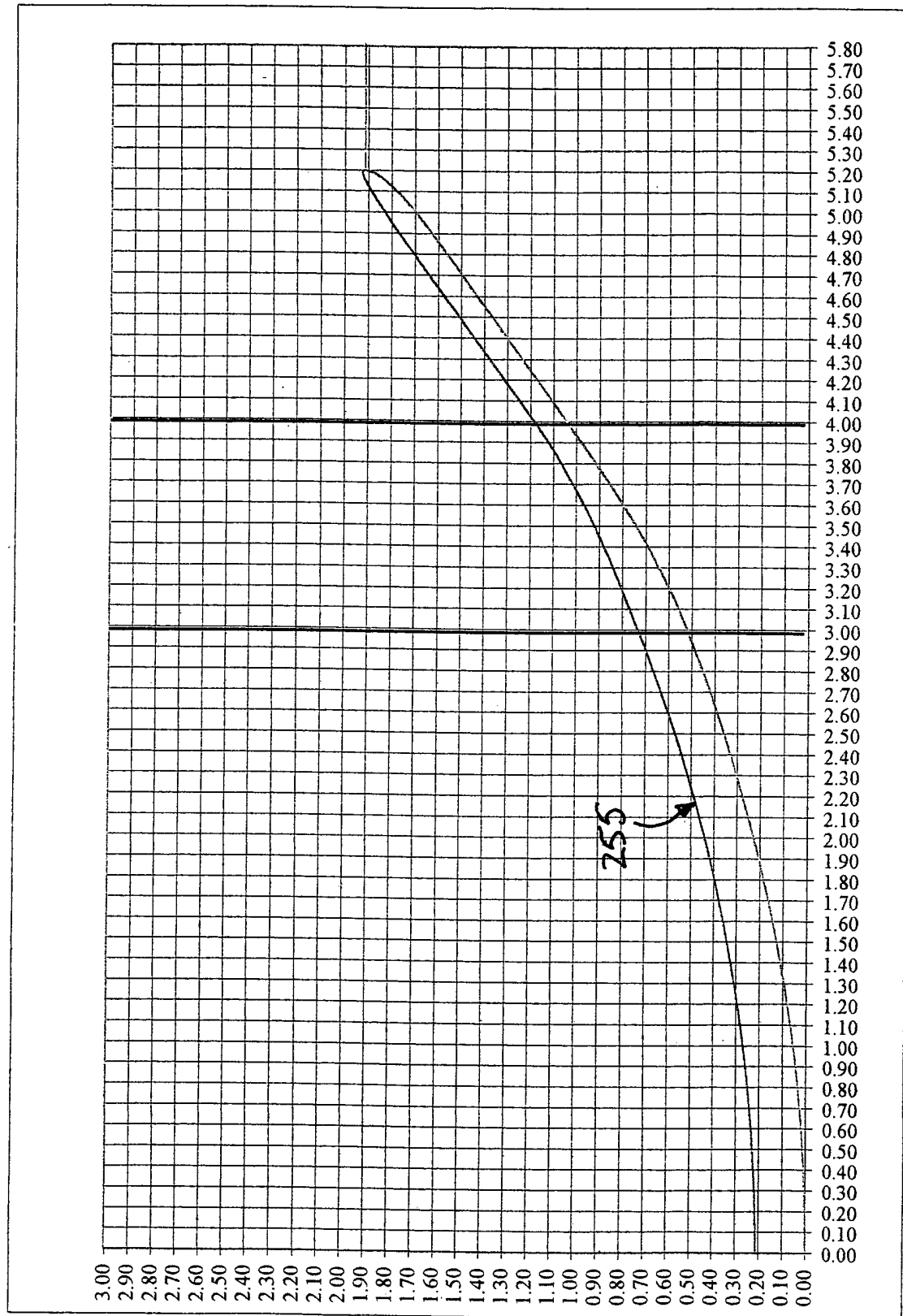
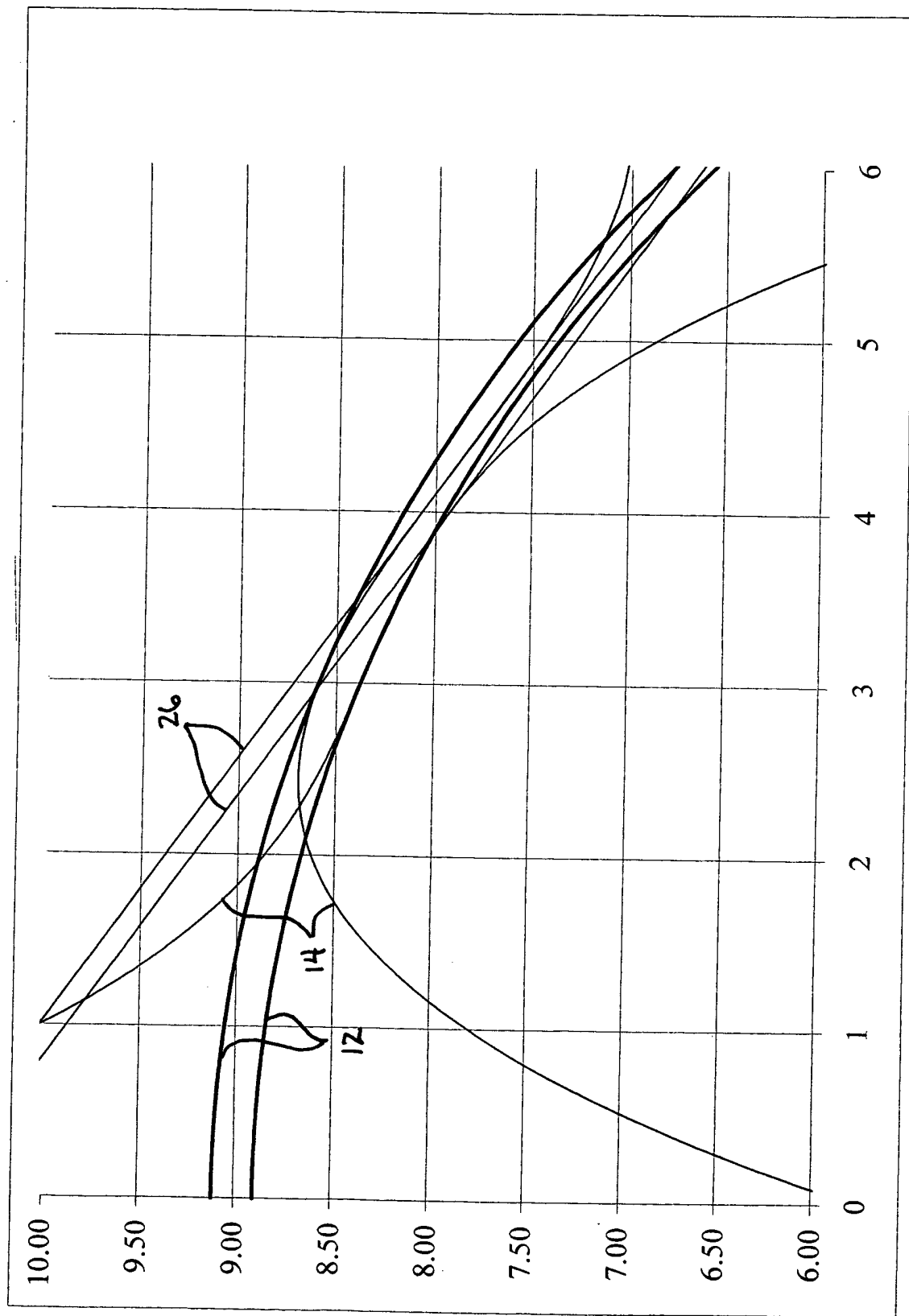


FIG.-18



Selected bc (6.9-10.4/0.1) (7.70-9.1/0.05)		8.35	Suggested Base Curve is 8.3		200		202		204	
BC	Radial distance (OZ2) from the lens center to 1st junction mm (1.0-5.9/0.1)	2.50	3B							
J1	Width of the S curve mm (.75,1)	2.12	2.00	EYE						
SW	Lens material (FP30, FP60, FP92, FP151, HDS, Other)	HDS		Ref. Index of material used = 1.449 If 'other' was selected input RI in Cell H4						
MAT	lens power desired (-1.00, -0.50, 0.00, 0.50, 0.75, 1.0, 1.25, 1.5, 2.0, 2.5)	2.14		Front Surface central radius = 8.32						
P	Delta R (mm) translation of 1st junction radially from BC origin (0.08-0.2/0.02)	0.14	0.50	True center thickness (mm) = 0.148						
Q2	Delta R (mm) translation of 2nd junction radially from BC origin (0.1-0.22/0.02)	0.18		true offset between landing zones at J2 = 0.179						
A	Angle of the landing zone (-25.5 to -50.0/5)	-38.00		Present lens height (mm) above cornea at diameter of tangential touch = 0.038						
D	selected lens diameter mm (8.0-12.9/0.1)	10.20		Diameter recommended from HVID = 10.2						
SD	Selected depth of the S curve mm (-1.5-1.0/0.05) (0.3-0.65/0.025) use next smaller than est.	1.116		Recommended depth (mm) S curve for desired correction @6u/D = 1.116 mm						
				Edge lift at selected diameter = 0.071						
				Dia giving desired LZ lift = 10.53						
				Diameter where LZ would make tangential touch = 9.21						
				Estimated elevation at J2 = 0.040						
				Origin for lentic curve is on y axis displaced from apex of front curve = 7.541						
				recommended radius of curve for lentic = 7.615						
				Recommended diameter for lentic = 6.784						
				Actual power (D) difference between bc and apical cornea = -6.13						
				Desired edge lift (mm) when landed at full Diameter = 0.09272						
				Ab, the long axis of the ellipse creating the base curve edge (below)						
				ellipticity of the cornea						
				lens / cornea power (D) difference wanted						
				comcal apical radius (mm)						
				Volume between BC and cornea (uL) = 0.699						
				Volume between S curve and cornea (uL) = 2.812						
				Volume between pretouch Landing Zone and cornea (uL) = 0.122						
				TOTAL VOLUME = 3.633(uL)						
				Diameter where LZ would make tangential touch = 9.21						
				Dia giving desired LZ lift = 10.53						
				Diameter recommended from HVID = 10.2						
				Recommended depth (mm) S curve for desired correction @6u/D = 1.116 mm						
				Edge lift at selected diameter = 0.071						
				fixed (rear thickness)						
				base to front at which the transition from base ellipse to front ellipse is found (below)						
				Minimum thickness peripheral to J1 before lentic (in mm > Delta 1) see below						
				SPHERICAL FRONTS- max thickness peripheral to J1 before lentic (in mm > Delta 2) see below						
				FOR SPHERICAL FRONTS target edge thickness below						
				ellipticity of the cornea						
				Desired edge lift (mm) when landed at full Diameter = 0.09272						
				Actual power (D) difference between bc and apical cornea = -6.13						
				Desired edge lift (mm) when landed at full Diameter = 0.09272						
				ellipticity of the cornea						
				lens / cornea power (D) difference wanted						
				comcal apical radius (mm)						
				Volume between BC and cornea (uL) = 0.699						
				Volume between S curve and cornea (uL) = 2.812						
				Volume between pretouch Landing Zone and cornea (uL) = 0.122						
				TOTAL VOLUME = 3.633(uL)						
				Diameter where LZ would make tangential touch = 9.21						
				Dia giving desired LZ lift = 10.53						
				Diameter recommended from HVID = 10.2						
				Recommended depth (mm) S curve for desired correction @6u/D = 1.116 mm						
				Edge lift at selected diameter = 0.071						
				fixed (rear thickness)						
				base to front at which the transition from base ellipse to front ellipse is found (below)						
				Minimum thickness peripheral to J1 before lentic (in mm > Delta 1) see below						
				SPHERICAL FRONTS- max thickness peripheral to J1 before lentic (in mm > Delta 2) see below						
				FOR SPHERICAL FRONTS target edge thickness below						
				ellipticity of the cornea						
				Desired edge lift (mm) when landed at full Diameter = 0.09272						
				Actual power (D) difference between bc and apical cornea = -6.13						
				Desired edge lift (mm) when landed at full Diameter = 0.09272						
				ellipticity of the cornea						
				lens / cornea power (D) difference wanted						
				comcal apical radius (mm)						
				Volume between BC and cornea (uL) = 0.699						
				Volume between S curve and cornea (uL) = 2.812						
				Volume between pretouch Landing Zone and cornea (uL) = 0.122						
				TOTAL VOLUME = 3.633(uL)						
				Diameter where LZ would make tangential touch = 9.21						
				Dia giving desired LZ lift = 10.53						
				Diameter recommended from HVID = 10.2						
				Recommended depth (mm) S curve for desired correction @6u/D = 1.116 mm						
				Edge lift at selected diameter = 0.071						
				fixed (rear thickness)						
				base to front at which the transition from base ellipse to front ellipse is found (below)						
				Minimum thickness peripheral to J1 before lentic (in mm > Delta 1) see below						
				SPHERICAL FRONTS- max thickness peripheral to J1 before lentic (in mm > Delta 2) see below						
				FOR SPHERICAL FRONTS target edge thickness below						
				ellipticity of the cornea						
				Desired edge lift (mm) when landed at full Diameter = 0.09272						
				Actual power (D) difference between bc and apical cornea = -6.13						
				Desired edge lift (mm) when landed at full Diameter = 0.09272						
				ellipticity of the cornea						
				lens / cornea power (D) difference wanted						
				comcal apical radius (mm)						
				Volume between BC and cornea (uL) = 0.699						
				Volume between S curve and cornea (uL) = 2.812						
				Volume between pretouch Landing Zone and cornea (uL) = 0.122						
				TOTAL VOLUME = 3.633(uL)						
				Diameter where LZ would make tangential touch = 9.21						
				Dia giving desired LZ lift = 10.53						
				Diameter recommended from HVID = 10.2						
				Recommended depth (mm) S curve for desired correction @6u/D = 1.116 mm						
				Edge lift at selected diameter = 0.071						
				fixed (rear thickness)						
				base to front at which the transition from base ellipse to front ellipse is found (below)						
				Minimum thickness peripheral to J1 before lentic (in mm > Delta 1) see below						
				SPHERICAL FRONTS- max thickness peripheral to J1 before lentic (in mm > Delta 2) see below						
				FOR SPHERICAL FRONTS target edge thickness below						
				ellipticity of the cornea						
				Desired edge lift (mm) when landed at full Diameter = 0.09272						
				Actual power (D) difference between bc and apical cornea = -6.13						
				Desired edge lift (mm) when landed at full Diameter = 0.09272						
				ellipticity of the cornea						
				lens / cornea power (D) difference wanted						
				comcal apical radius (mm)						
				Volume between BC and cornea (uL) = 0.699						
				Volume between S curve and cornea (uL) = 2.812						
				Volume between pretouch Landing Zone and cornea (uL) = 0.122						
				TOTAL VOLUME = 3.633(uL)						
				Diameter where LZ would make tangential touch = 9.21						
				Dia giving desired LZ lift = 10.53						
				Diameter recommended from HVID = 10.2						
				Recommended depth (mm) S curve for desired correction @6u/D = 1.116 mm						
				Edge lift at selected diameter = 0.071						
				fixed (rear thickness)						
				base to front at which the transition from base ellipse to front ellipse is found (below)						
				Minimum thickness peripheral to J1 before lentic (in mm > Delta 1) see below						
				SPHERICAL FRONTS- max thickness peripheral to J1 before lentic (in mm > Delta 2) see below						
				FOR SPHERICAL FRONTS target edge thickness below						
				ellipticity of the cornea						
				Desired edge lift (mm) when landed at full Diameter = 0.09272						
				Actual power (D) difference between bc and apical cornea = -6.13						
				Desired edge lift (mm) when landed at full Diameter = 0.09272						
				ellipticity of the cornea						
				lens / cornea power (D) difference wanted						
				comcal apical radius (mm)						
				Volume between BC and cornea (uL) = 0.699						
				Volume between S curve and cornea (uL) = 2.812						
				Volume between pretouch Landing Zone and cornea (uL) = 0.122						
				TOTAL VOLUME = 3.633(uL)						
				Diameter where LZ would make tangential touch = 9.21						
				Dia giving desired LZ lift = 10.53						
				Diameter recommended from HVID = 10.2						
				Recommended depth (mm) S curve for desired correction @6u/D = 1.116 mm						
				Edge lift at selected diameter = 0.071						
				fixed (rear thickness)						
				base to front at which the transition from base ellipse to front ellipse is found (below)						
				Minimum thickness peripheral to J1 before lentic (in mm > Delta 1) see below						
				SPHERICAL FRONTS- max thickness peripheral to J1 before lentic (in mm > Delta 2) see below						
				FOR SPHERICAL FRONTS target edge thickness below						
				ellipticity of the cornea						
				Desired edge lift (mm) when landed at full Diameter = 0.09272						
				Actual power (D) difference between bc and apical cornea = -6.13						
				Desired edge lift (mm) when landed at full Diameter = 0.09272						
				ellipticity of the cornea						
				lens / cornea power (D) difference wanted						
				comcal apical radius (mm)						
				Volume between BC and cornea (uL) = 0.699						
				Volume between S curve and cornea (uL) = 2.812						
				Volume between pretouch Landing Zone and cornea (uL) = 0.122						
				TOTAL VOLUME = 3.633(uL)						
				Diameter where LZ would make tangential touch = 9.21						
				Dia giving desired LZ lift = 10.53						
				Diameter recommended from HVID = 10.2						
				Recommended depth (mm) S curve for desired correction @6u/D = 1.116 mm						
				Edge lift at selected diameter = 0.071						
				fixed (rear thickness)						
				base to front at which the transition from base ellipse to front ellipse is found (below)						
				Minimum thickness peripheral to J1 before lentic (in mm > Delta 1) see below						
				SPHERICAL FRONTS- max thickness peripheral to J1 before lentic (in mm > Delta 2) see below						
				FOR SPHERICAL FRONTS target edge thickness below						
				ellipticity of the cornea						
				Desired edge lift (mm) when landed at full Diameter = 0.09272						
				Actual power (D) difference between bc and apical cornea = -6.13						
				Desired edge lift (mm) when landed at full Diameter = 0.09272						
				ellipticity of the cornea						
				lens / cornea power (D) difference wanted						
				comcal apical radius (mm)						
				Volume between BC and cornea (uL) = 0.699						
				Volume between S curve and cornea (uL) = 2.812						
				Volume between pretouch Landing Zone and cornea (uL) = 0.122						
				TOTAL VOLUME = 3.633(uL)						
				Diameter where LZ would make tangential touch = 9.21						
				Dia giving desired LZ lift = 10.53						
				Diameter recommended from HVID = 10.2						
				Recommended depth (mm) S curve for desired correction @6u/D = 1.116 mm						
				Edge lift at selected diameter = 0.071						
				fixed (rear thickness)						
				base to front at which the transition from base ellipse to front ellipse is found (below)						

FIG.-20

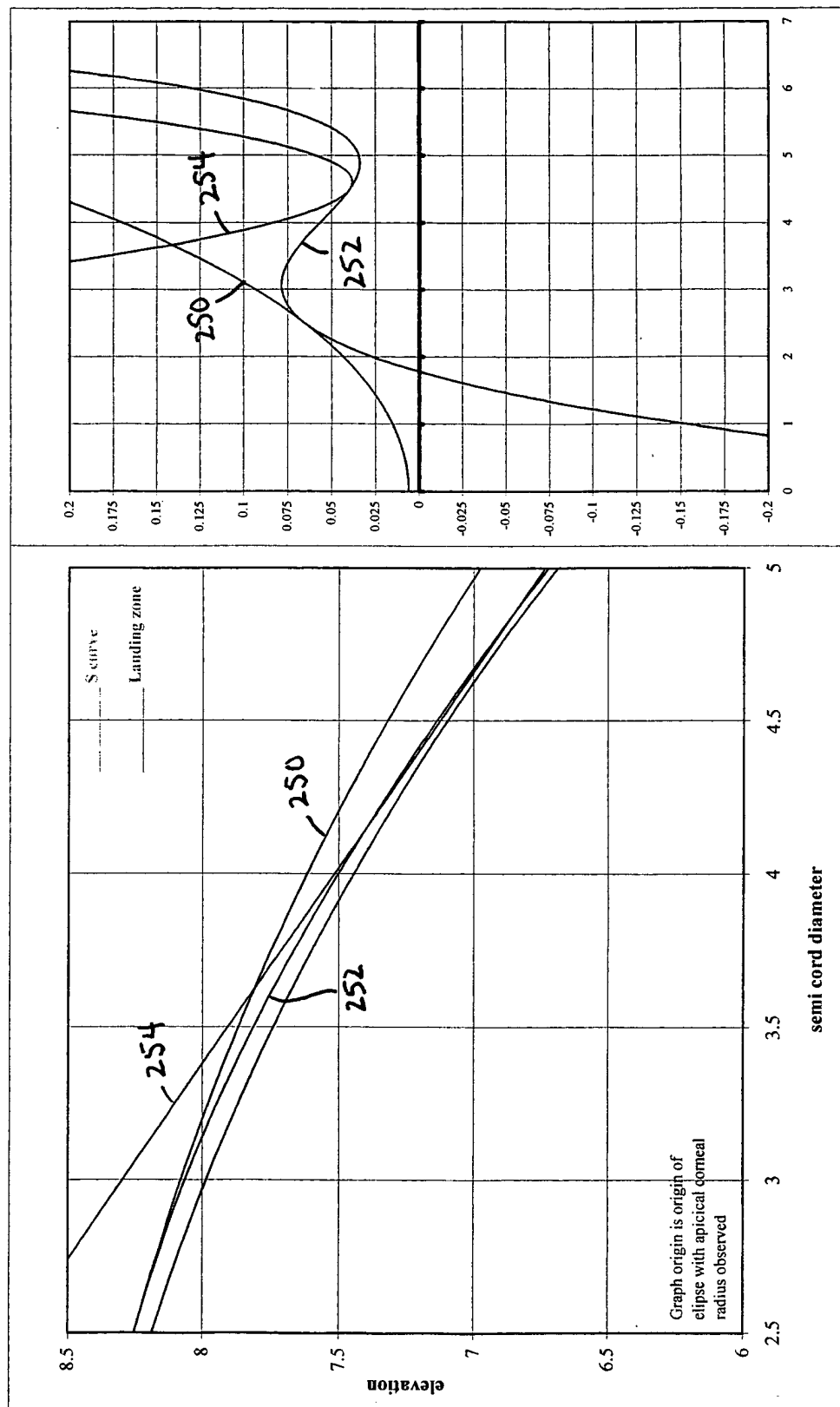


FIG.-21

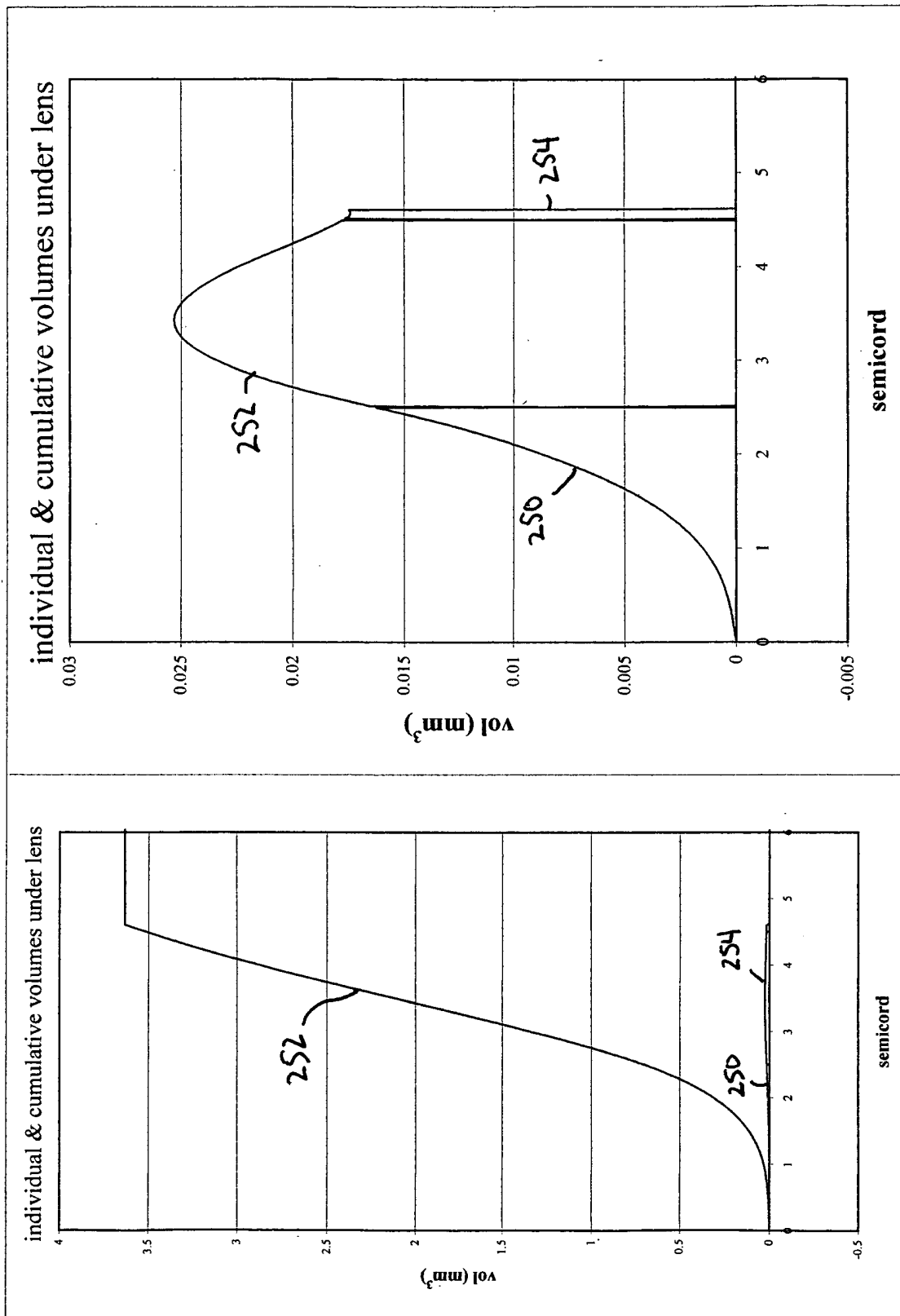


FIG.-22

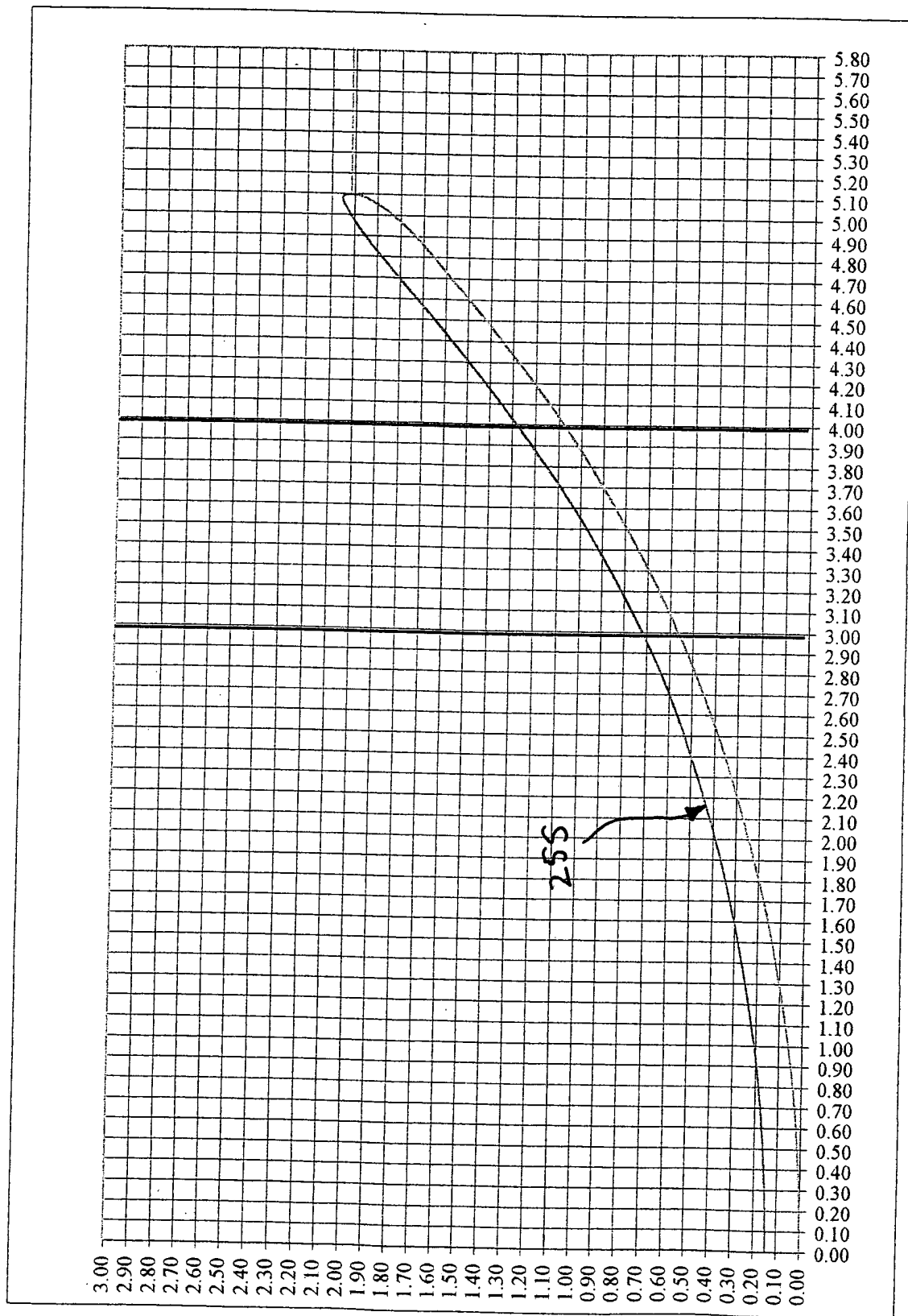


FIG.-23

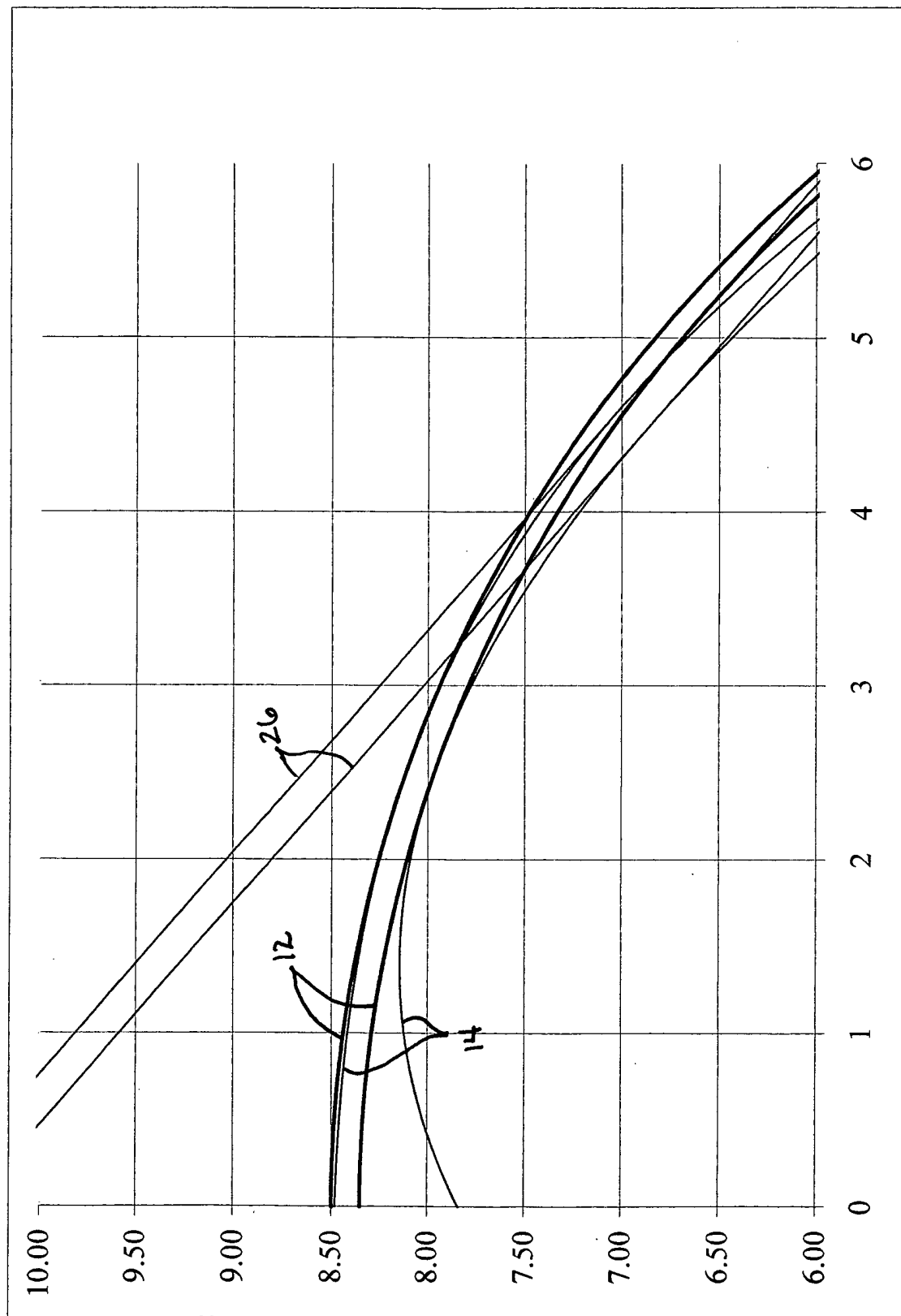


FIG-24

FIG.-25

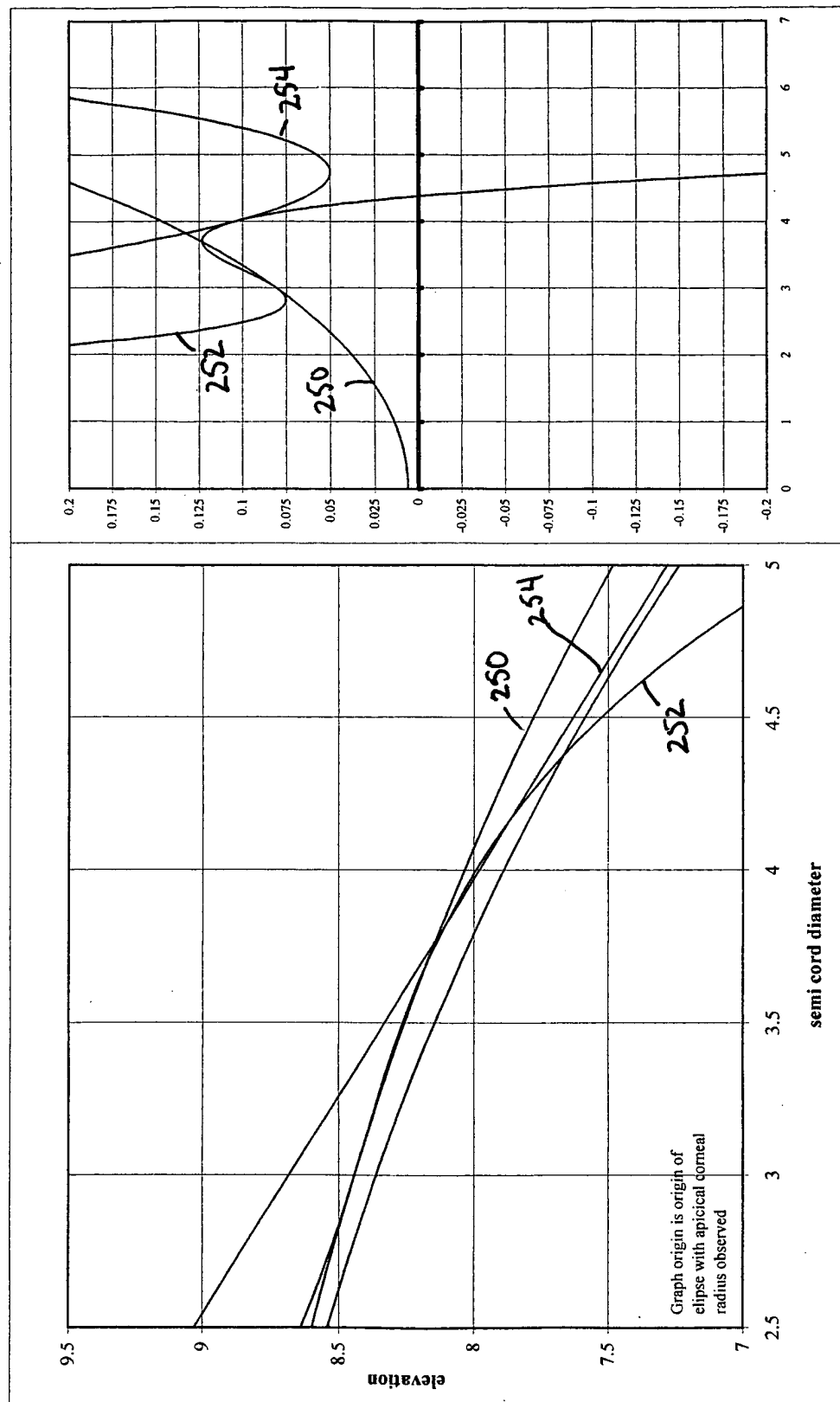


FIG.-26

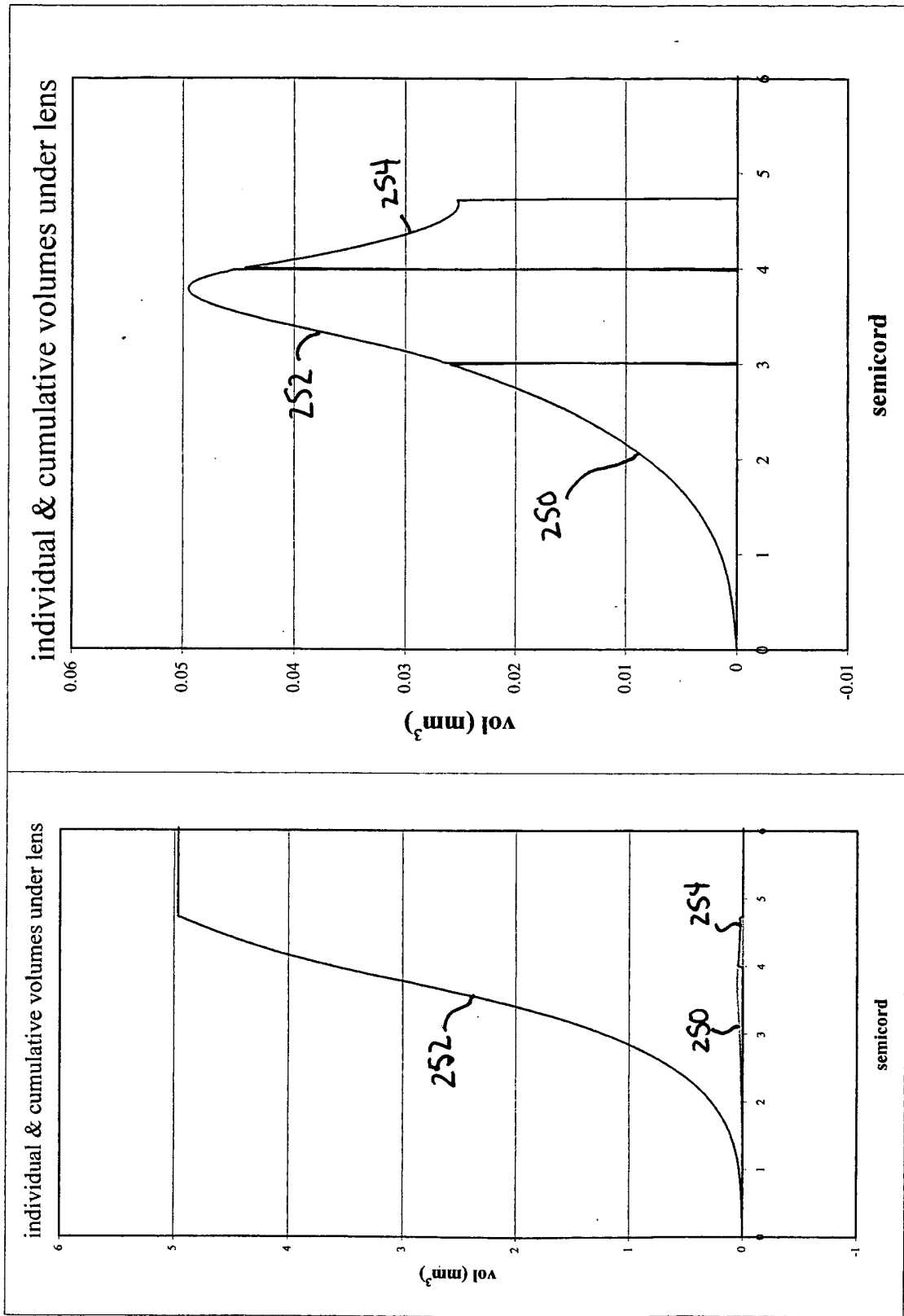


FIG.-27

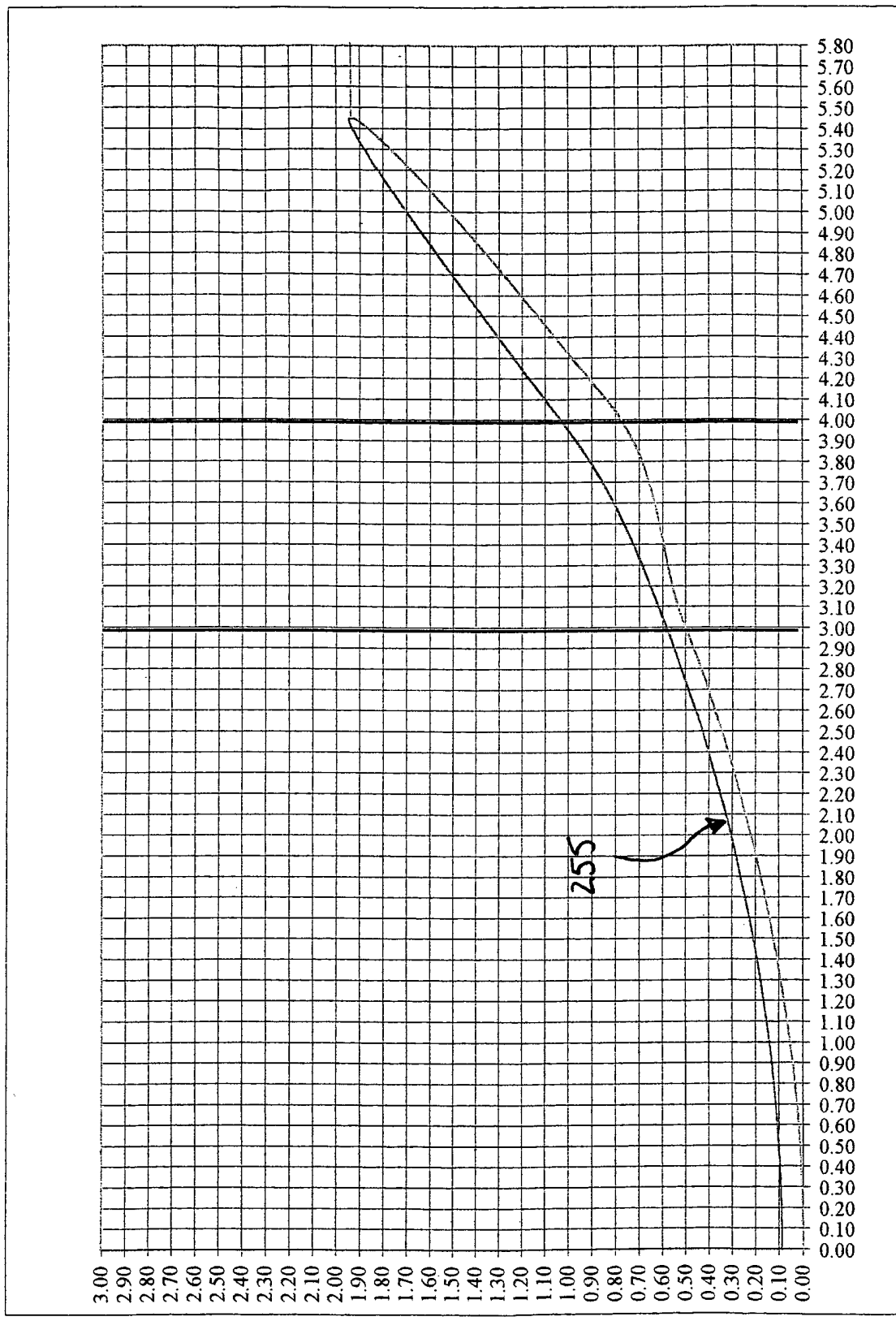


FIG.-28

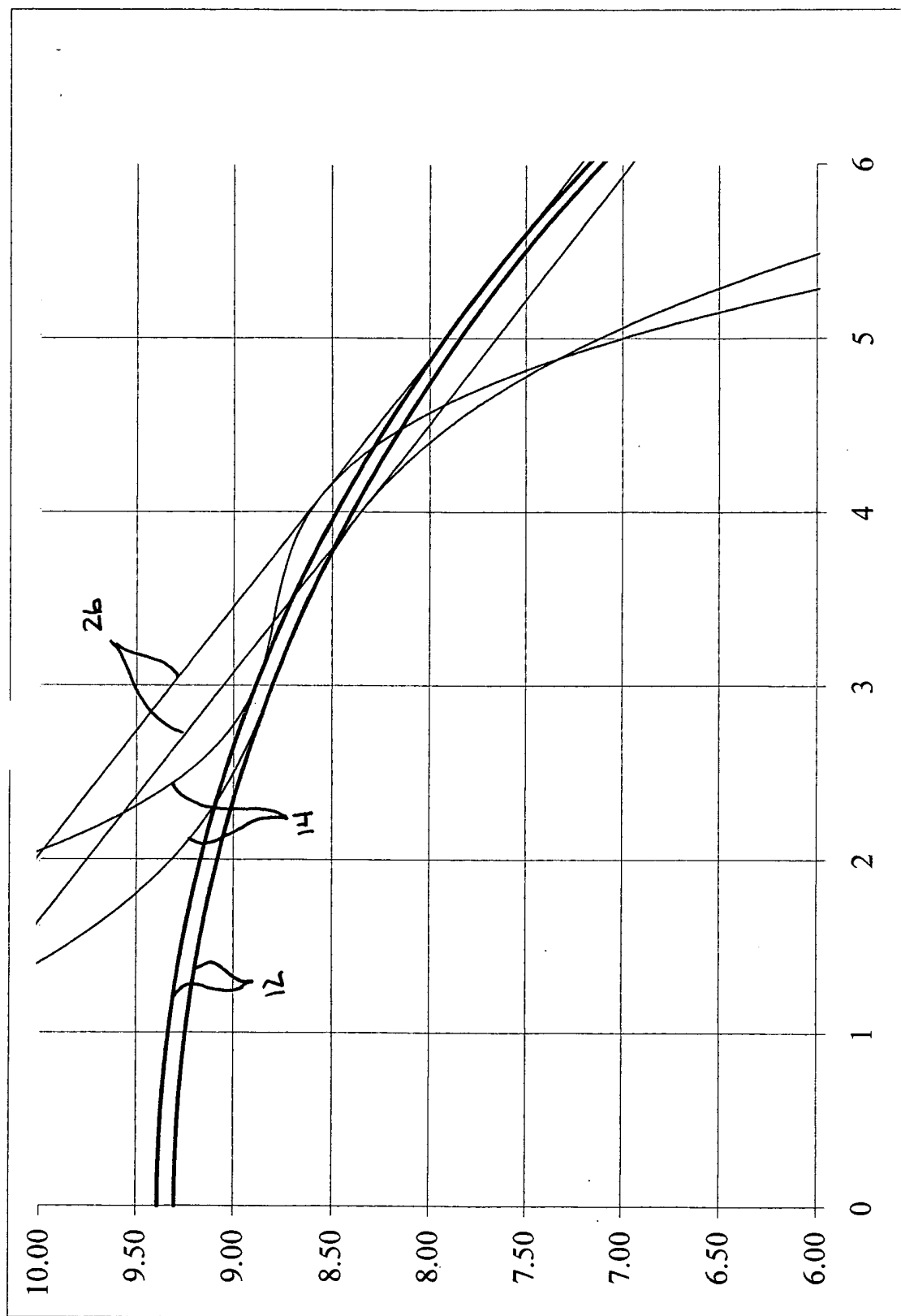


FIG.-29

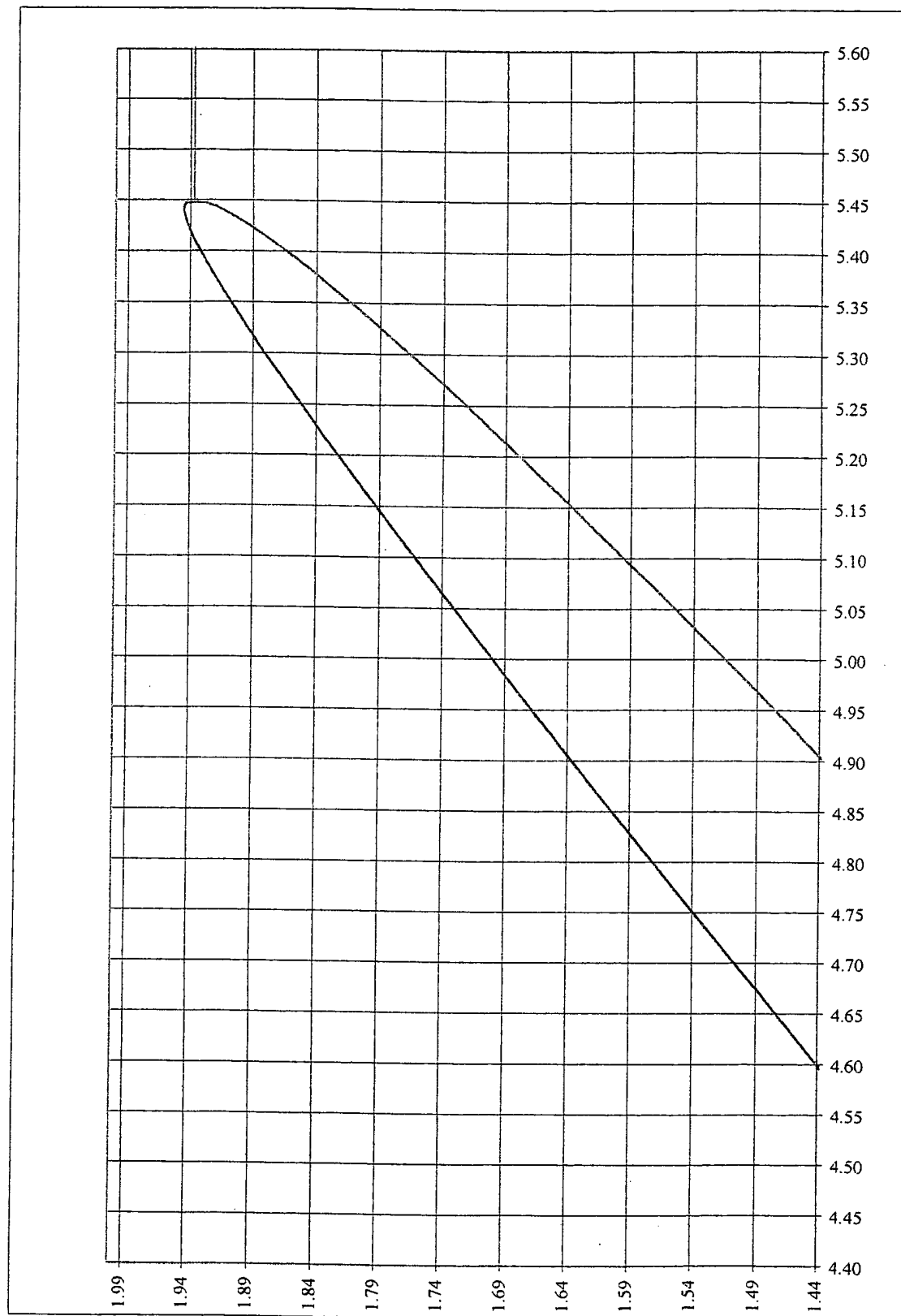


FIG-30

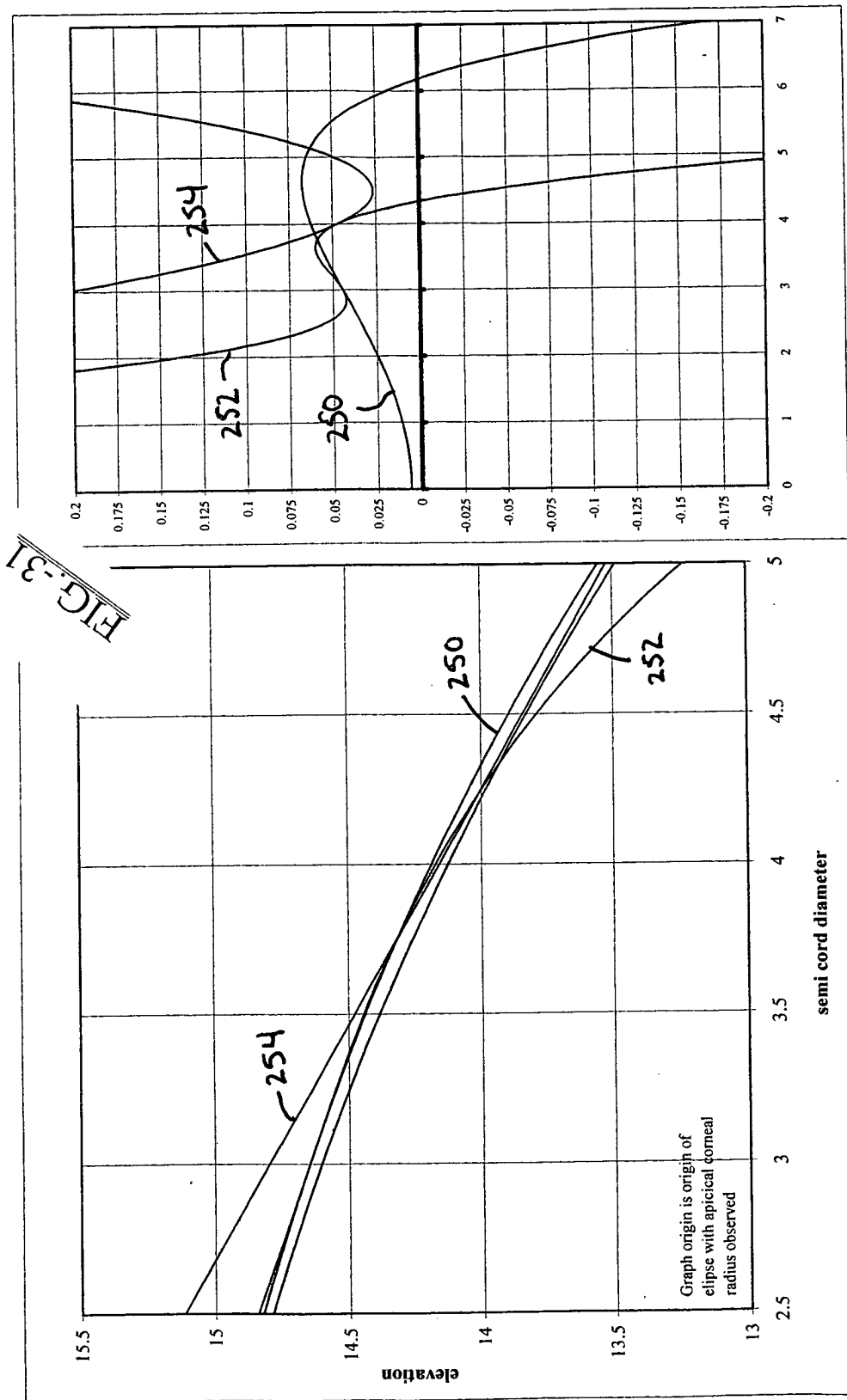


FIG.-32

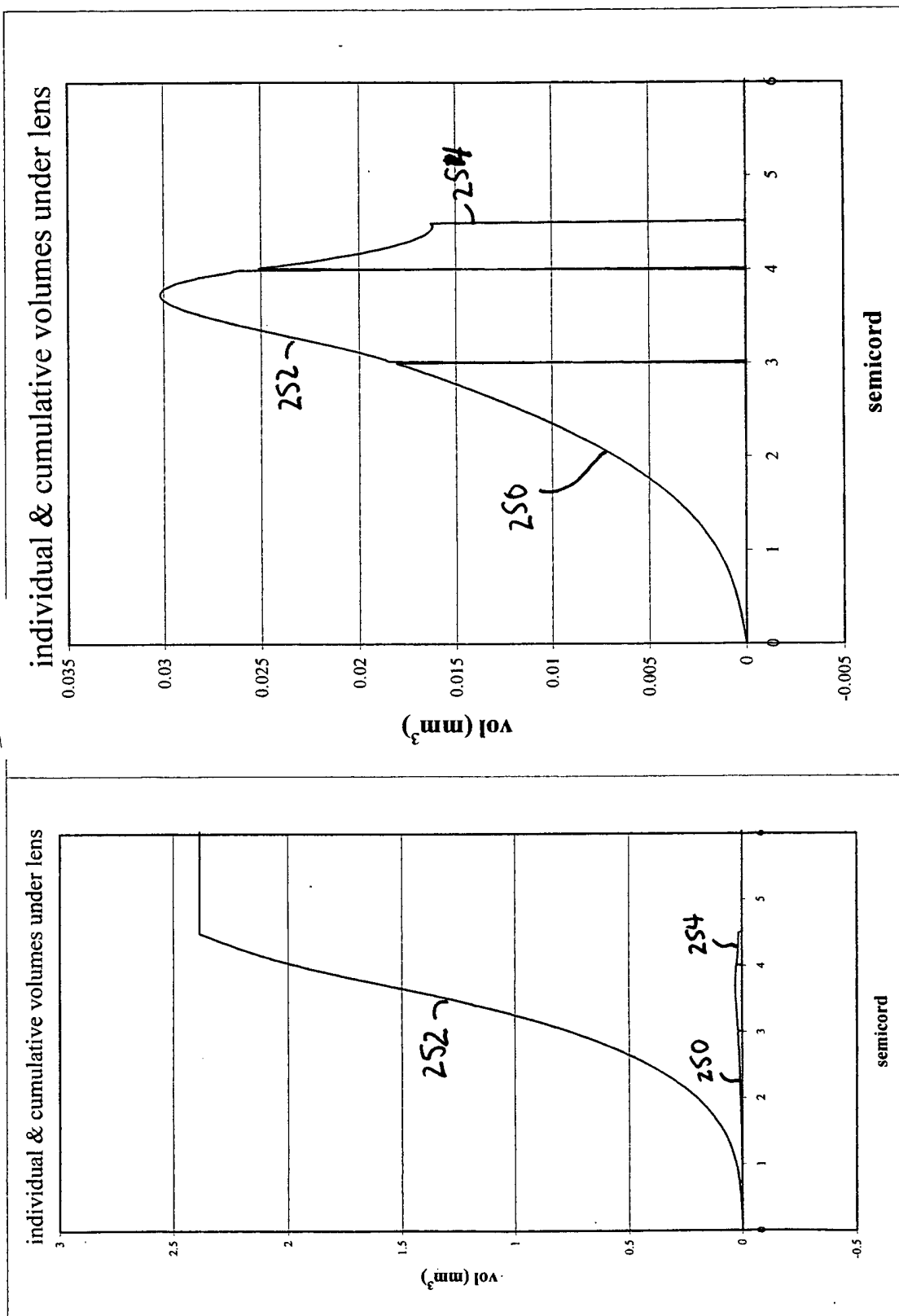


FIG.-33

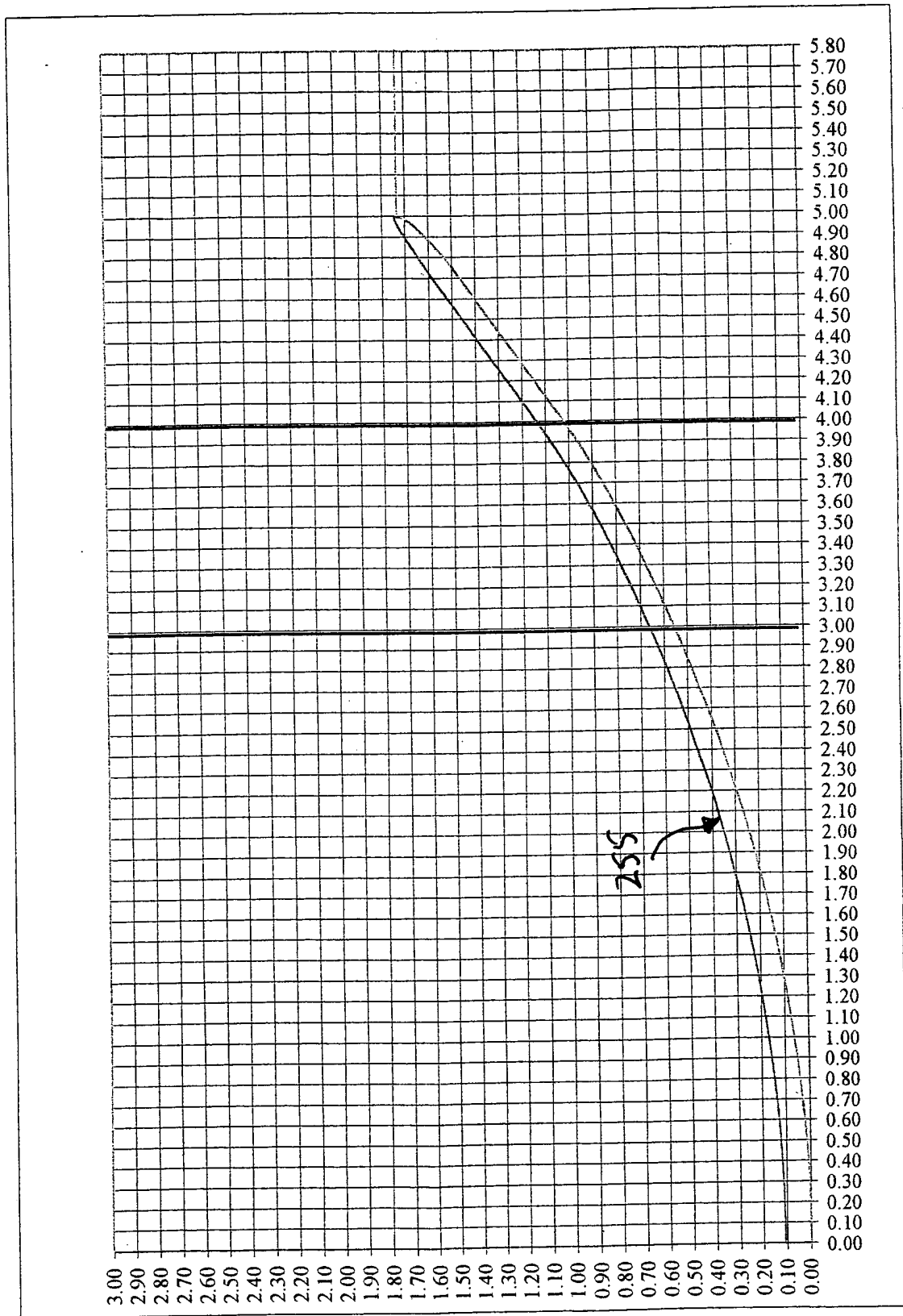
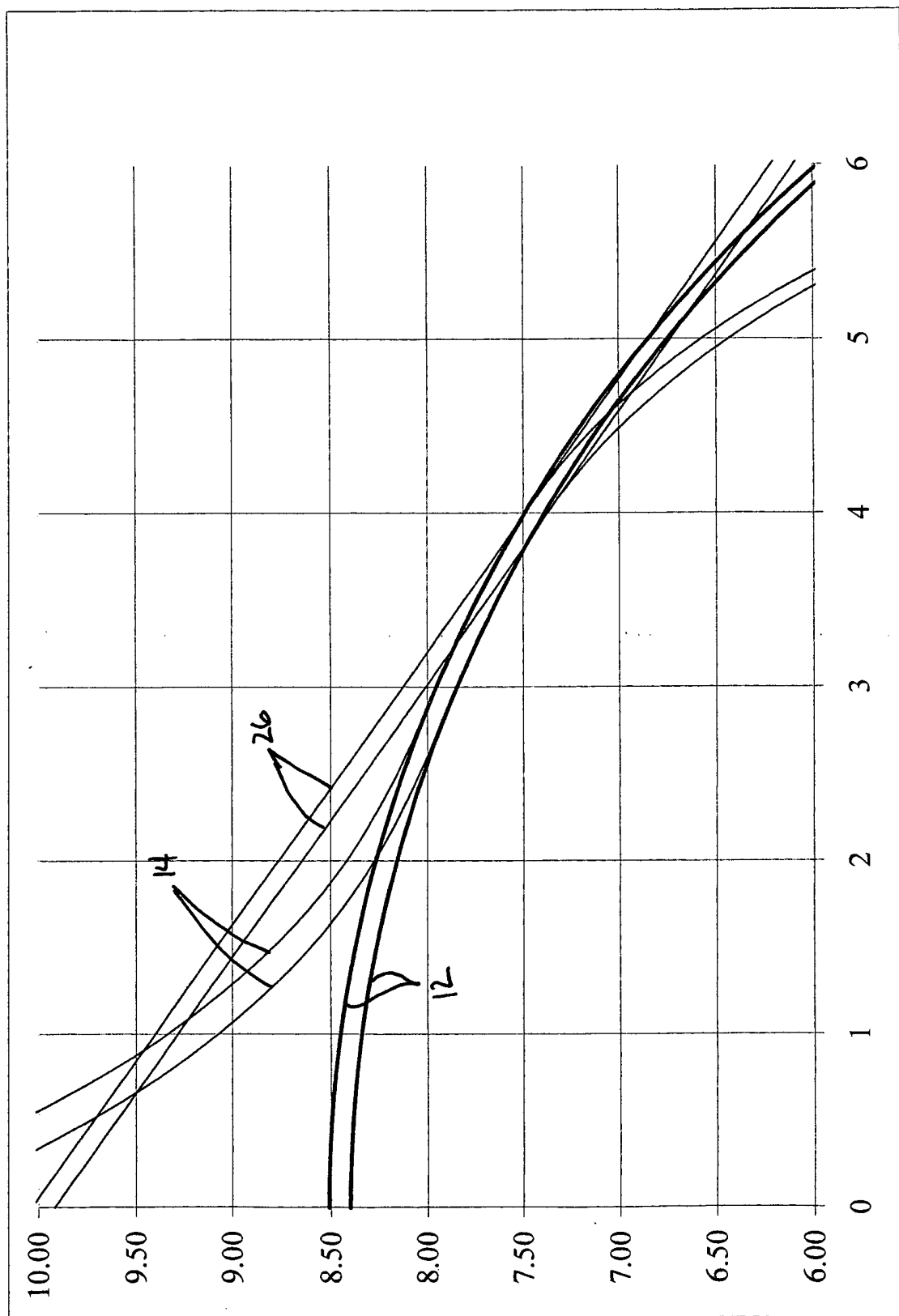


FIG.-34



Selected bc (6.9-10.4/0.1) (7.70-9.1/0.05)		Suggested Base Curve is 7.5		200					
BC	Radial distance (OZ/2) from the lens center to 1st junction mm (1.0-5.9/0.1)	2.50	5B			corneal apical radius (mm)	7.8	lens / cornea power (D) difference wanted	2.00
J1	Width of the S curve mm (7.5,1)	1.50	EYE					ellipticity of the cornea	0.3
SW	Lens material (FP30, FP60, FP92, FP151, HDS, Other)	210	HDS	Ref. Index of material used = 1.449 If 'other' was selected input RI in Cell H4		Volume between BC and cornea (uL) = 0.298		Desired edge lift (mm) when landed at full Diameter = 0.062	11.9
MAT	Lens power desired (-1.00, -0.50, 0.00, 0.50, 0.75, 1.0, 1.25, 1.5, 2.0, 2.5)	0.50		Front Surface central radius = 7.49		Volume between S curve and cornea (uL) = 1.383		Ab, the long axis of the ellipse creating the base curve edge (below)	1.45
P	Delta R (mm) translation of 1st junction radially from BC origin (0.08-0.2/0.02)	0.14		True center thickness (mm) = 0.149		Volume between pretouch Landing Zone and cornea (uL) = 0.491	246	Recommended diameter for lentic = 5.737	
Q2	Delta R (mm) translation of 2nd junction radially from BC origin (0.1-0.22/0.02)	0.18		true offset between landing zones at J2 = 0.180		TOTAL VOLUME = 2.171 (uL)		recommended radius of curve for lentic = 8.482	0.18
A	Angle of the landing zone (-25.5 to -50.0/5)	-35.00		Present lens height (mm) above cornea at diameter of tangential touch = 0.024		Diameter where LZ would make tangential touch = 9.08		Origin for lentic curve is on y axis displaced from apex of front curve = 8.553	
D	selected lens diameter mm (8.0-12.9/0.1)	10.00		Diameter recommended from HVID = 10.9		Dia giving desired LZ lift = 10.52		Estimated elevation at J2 = 0.056	0.01
SD	Selected depth of the S curve mm (.15-1.0/0.05) (0.3-0.65/ .025) use next smaller than est.	0.636		Recommended depth (mm) S curve for desired correction @6w/D = 0.646 mm		Edge lift at selected diameter = 0.047	0.024	base to front at which the transition from base ellipse to front ellipse is found (below)	0.25
									0.01

FIG - 35

FIG.-36

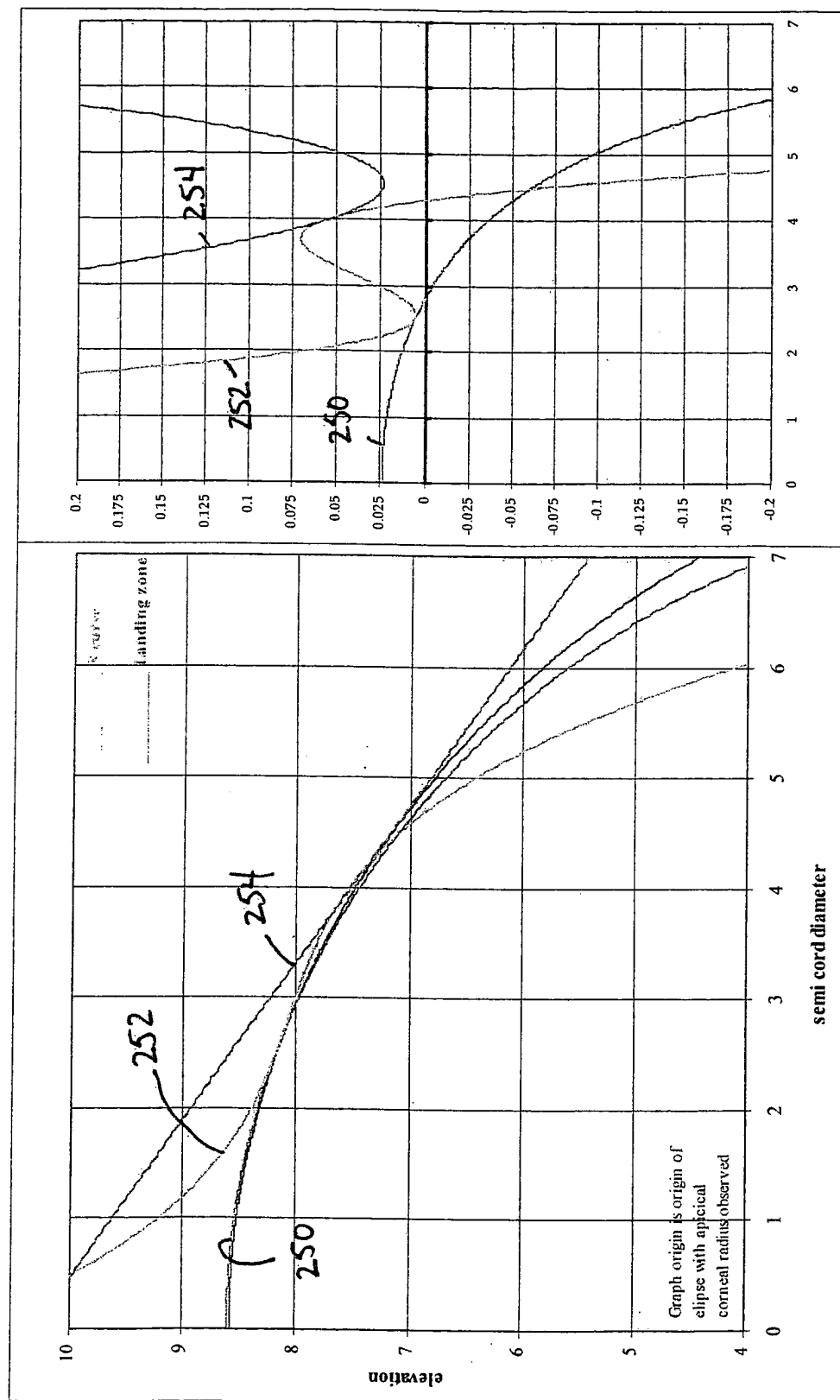


FIG. 37

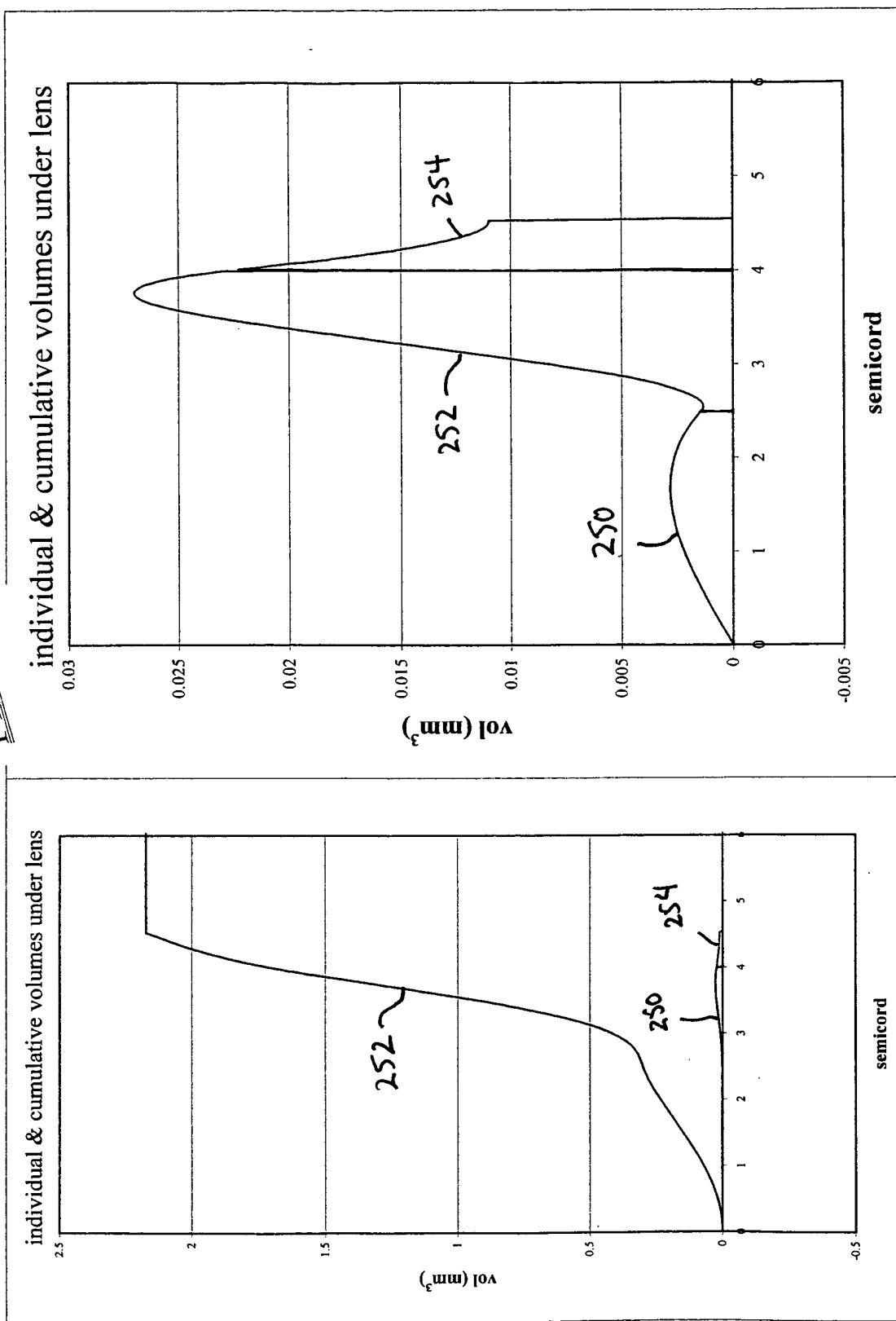


FIG.-38

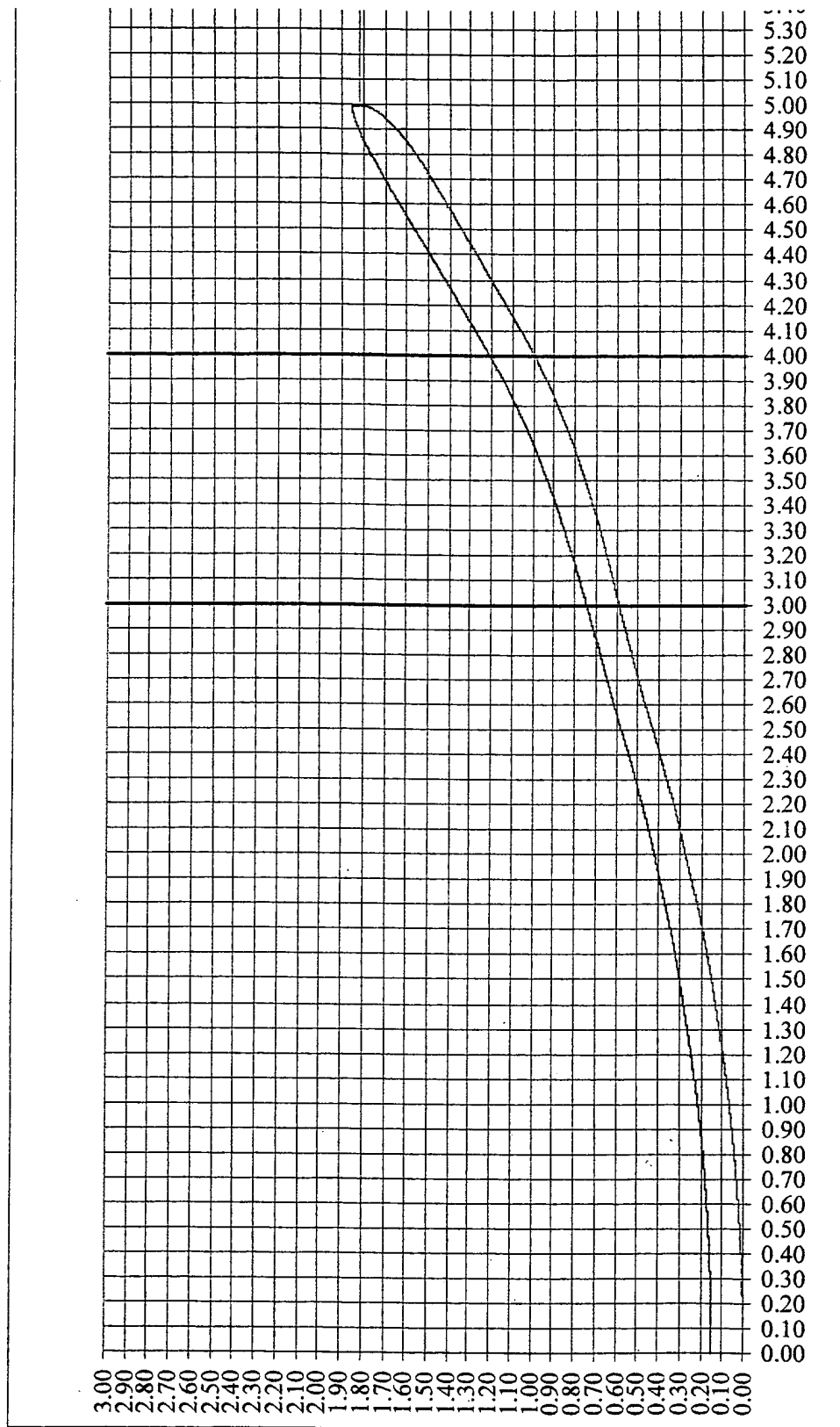


FIG.-39

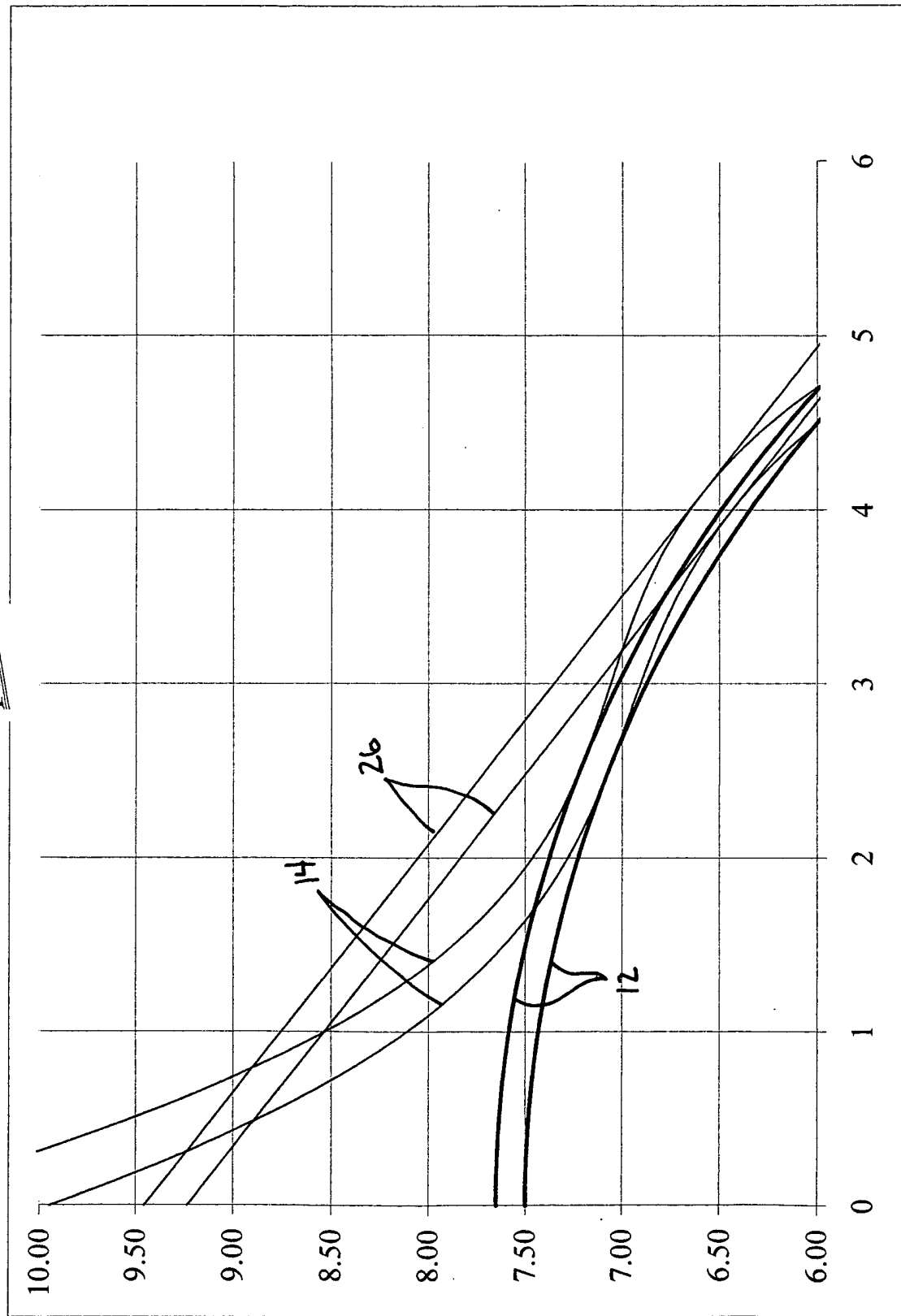


FIG. - 40

Determine necessary spectacle correction, add up to 0.5 diopter overcorrection to extend duration of treatment

350

Determined corneal curvature from keratometry or topography and add 0.2 mm per Diopter of needed correction to select lens base curve.

352

Measure horizontal visible iris diameter and select a lens diameter approximately 1 mm smaller than HVID

354

Use topography information or trial fitting with various landing zones, to find the angle whose point of tangency is half way between the selected diameter and 8mm (sum of standard central zone width (6mm) and connector zone width 1mm (2mm considering both sides).

356

Using fluoresce drops with trial lenses (of the selected diameter and base curve and angle and having various connector zone depths) estimate the rectangle depth that leaves the tangent point elevated above the cornea 6 microns per dioter of needed correction. Similar estimates can be made using topographical information.

358

Compare to model eye using software and confirm lens fit on patient. Review LZ elevation, edge lift, apical contact and centration.

360

458

FIG.-4

FIG-42

